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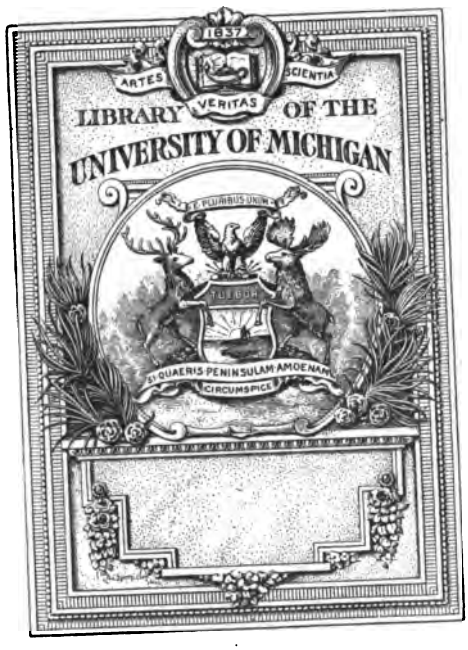
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NORTH CAROLINA

MEDICAL JOURNAL.

JANUARY, 1861.

Original Communications.

A REPLY TO DR. W. T. HOWARD'S REVIEW OF THE "ESSAY ON MALARIAL PNEUMONIA," WHICH APPEARED IN THE TRANSACTIONS OF THE MEDICAL SOCIETY OF N. CAROLINA.

BY OTIS FREDERIC MANSON, M. D. MEMBER OF THE MED. SO. OF N. C.

At a meeting of the State Medical Society of North Carolina, held at Edenton in April, 1857, we had the honor of laying before that body, a brief sketch of the form of Pneumonia, usually observed in our field of labor, with a few observations on its physical signs, pathology, diagnosis, and the mode of treatment which we had found most successful. As the profession of this State have already been apprised, this essay has been made the subject of a prolonged and searching review by Dr. W. T. Howard, of Warrenton, a paper not only unparalleled in the annals of medical criticism for its unprecedented length, but also as being evidently the result of a degree of labor immensely disproportionate to the fugitive production selected as its text.

Nor this alone. Were this so styled "Review" only objectionable from its tedious and unnecessary prolixity or as being the vehicle of adverse views, we should have pass-

ed it by in silence, but its author, in order to carry his point, has not only taken every advantage which ingenuity could invent, or reckless mutilation of recorded authorities afford, he has not only placed the most erroneous and indefensible construction on our language, but his production is marred by a tone of arrogant pretension and studied depreciation throughout, and ridicule and satire have been called in aid when misrepresentation and contrivance failed.

We therefore feel impelled to enter into the contest which our critic so eagerly and ardently has sought. Deeply impressed with the truth and importance of the views which we have announced, we should not only be recreant to duty if we failed to use our best endeavors to sustain them, but unworthy of our mission if we succumbed without an effort to the assaults of self-constituted critics and flatulent reviewers.

THE ALLEGED MOTIVES OE THE "REVIEWER."

As our critic justly foresaw that his extraordinary performance would naturally lead to an inquiry into the reasons for such a vast expenditure of time and toil, he has therefore doubtless felt it his duty to offer an apologetic declaration of the motives which have led him to engage in the task. We beg leave to examine these *seriatim.*

1st. That we have assserted "that there exists among the medical men of the South, great confusion of ideas, and consequently great ignorance and want of skill in regard to the diagnosis and treatment of the several forms of Pneumonia," and that therefore, in order to combat these "charges of so grave a character against the practitioners of the South," that it is demanded of those who do not consider themselves amenable to them to notice them, and he therefore has chosen as an arena, in which to enter himself as the champion of southern medicine, "the State Medical Society" to whom this (my) Essay was first submitted.

Certainly every man ought to be best acquainted with

his own motives, his own incentives to action, but it is not the less true that many are constantly mistaking them and this doubtless has been the case with our bold and disinterested defender of southern physicians, who alone of all the sons of our sunny clime has felt himself specially called to vindicate their skill from aspersion. That our critic is in error in regard to this being one of his motives, we shall easily prove and the only witness shall be himself. If we were to admit, which we do not, that we have assailed, as asserted by our reviewer, the talents and skill of the great body of the physicians of the south, we would hold that our critic has completely incapacitated himself for becoming their vindicator, or for urging this as an objection to our essay, from the simple fact that he has made *positive* and *direct charges* of the identical character which he declares we have implied, and lo! the proof. Let the reader turn to his review (N. C. Med. Journal, Vol. 2, No. 1, page 324) and he will perceiye these words written by Dr. Howard himself:

"It may be remarked . . . . . that there is not perhaps any disease so actively treated in the south as pneumonia. The vast majority of cases are pretty heavily dosed with calomel and tartar emetic—a combination, as we shall hereafter see, particularly apt to light up gastro-intestinal irritation and which sometimes proceeds to a most destructive inflammation."

Now unless our reviewer is prepared to maintain that the vast majority of cases of pneumonia in the south are pretty heavily dosed by a minority of southern practitioners, he here expressly charges them with the gravest general and fatal mal-practice. We therefore declare it as our opinion, that our reviewer must be in error in supposing that this was one of his motives for engaging in his task, viz: to defend the skill and talents of his southern brethren.

Before we proceed further, let us compare these wholesale accusations of our critic with those, which, according to him, we haye stated "expressly or by necessary implication;" let us like him, insert the passages from which he has deduced his conclusions as to our meaning, and endeav-

or to ascertain it he has not done us some of that "possible injustice" which he would appear so delicately fearful of committing:

'It cannot be doubted but that great confusion exists at present in regard to the various forms of pneumonia. It perhaps has occurred to every *experienced physician*, to have seen them all included in the same category, and treated in the same manner; errors to be deeply deplored, attended as they often are by the most disastrous consequences. Inflammation of the lungs, like inflammation of any other structure, may be altogether different in its nature, complications and terminations; and though technically included under the same term, its various forms require as totally opposite modes of management as the most dissimilar diseases of organs the most remote in situation and unlike in function. One practitioner, with an eye solely fixed on the long affection resorts to the active antiphlogistics of sanguineous depletion and antimony, another, warned by the results of such means, adopts the expectant or stimulant plan; whilst a third, led on by that spirit of generalization which has has been the bane of our science, appeals to Cinchona in all cases, and under all circumstances.

Who is to blame? Assuredly we of the South! Studying the works almost solely of British and continental writers, which, however perfect in all points for those regions, are sadly deficient for us, we force the forms of our diseases to bend to their descriptions, and blindly follow a treatment intended for varieties of disease we never witnessed. Consummate and fatal folly! Yet, year passes year only to note its repetition, whilst we, reclining in inglorious ease or censurable indifference, view the perpetuation of the error, knowing too that hundreds are yearly added to our ranks who will have to pass through the same trials and difficulties, and experience the same disasters we encountered, before they will be enabled to diagnose correctly, or treat successfully any diseases, save those common to all countries, without a warning, a sign or explanation from us to guide the neophyte through the labyrinth before him. Oh! awake my friends! here is an open, unexplored path to usefulness and fame, an object to excite ambition, commendable in its pursuit, and glorious in its attainment; the secret of whose possession is comprised in three words—Observe! Compare! Record.

The existence of a form of pneumonia, having some undefined connection with periodical fever, has long been known and noticed; but unfortunately for the student of the present day, the affection has not attracted the attention of recent investigators, and is only cursorily and imperfectly noticed by any of the modern standard authorities.

In my opinion the phase of disease whose delineation is now attempted,

is the form of pneumonia generally seen by southern observers; that its peculiarities are often unrecognized, being often confounded with simple typhoid and other varieties of pulmonic lesion. Not only this, but the assertion is here made that under proper management, this disease, although of decided fatal tendencies, is more under the control of remedial agents than any of the so-called phlegmasiæ. If these declarations are true, how important is it that its features should be familiarly known, in order that it may not be confounded with diseases chiefly affecting the same organs, but so unlike in character and nature.'

Now from these extracts our critic derives the following inferences as to our meaning. "That it states expressly, or by necessary implication, that there exists among the medical men of the south great confusion of ideas, and consequently great ignorance and want of skill among them in regard to the diagnosis and treatment of the several forms of pneumonia." We beg the reader to peruse carefully these extracts, and having done so we fear not but that his decision will acquit us of having unjustly assailed the knowledge and skill of our southern brethren, *en masse*, as interpreted by our critic, and that he will decide that it is only by an illiberal construction of our language that it can be made so to appear. The sentences are not so carefully worded as they assuredly would have been had we dreamed that such an interpretation would have been given them. Taken as a whole, however, without emphasizing any word, as our reviewer has thought proper to do, it seems to us clear that the imputations contained in them were clearly intended to apply to the "neophyte," or inexperienced practitioner, thus designated, and that the experienced men of the profession were censurable for withholding a warning or sign of explanation to guide him through the labyrinth before him. How would it be possible for us to warn or guide him if all were ignorant or unskilful; not only this, but the paragraph expressly states that we had *passed* through these trials and difficulties, and already *encountered* disasters before we were *enabled* to diagnose correctly, or treat successfully, our peculiar forms of disease. We regret that any one, even our ungenerous critic should have deemed us ca-

pable of such a wholesale disparagement of the experienced practitioners of the south. On the contrary, we believe that our art is not more successfully practised in any part of the globe than by the physicians of the southern States and that no men deserve more credit for so doing; for we repeat the declaration that to attain this skill they owe but little to "the modern standard authorities," so far as our peculiar forms of disease are concerned, and that if they have become skilful in the diagnosis or treatment of the form of Pneumonia, which is the subject of this discussion, that it has been either in consequence of the teachings of our experienced physicians, or after encountering untold dangers and disasters. That there is great confusion in regard to the pathology and diagnosis of this malady, we do not hesitate to repeat, and if of this further proof were wanting, the present controversy would afford a striking illustration of its truth. Alas! unfortunately, this "confusion" is not confined to this disease, nor yet bounded by the limits of our southern borders. Our science now presents itself as a young giant, who having rent asunder the shackles which have too long enchained his limbs and embarrassed his progress, is yet undecided whither to bend his steps. The system based upon Pathological Anatomy, which so long assumed the title of "*Orthodox Medicine*," and which, to use the language of Van Helmont* "like a bloody Moloch, sat President in the chairs of Medicine," has vanished at the apparition of the New Medical Constitution. The illusion of the chemist, that the living organism might be regarded as a laboratory whose operations were to be explained and whose derangements were to be remedied by the principles which presided over the reactions of dead medicine, and the thousand other fallacies which in turn have dazzled to delude, and betrayed to destroy, like *ignes fatui* have "paled their ineffectual fires" before the dawning light of rational induction.

*Ortus Medicinæ (Pleura Furens) p. 397. Amsterodami, 1648.

2nd. The next motive assigned by our reviewer for his ponderous *critique* is, that we having erred in our views in regard to the Physical signs, "though he does not assert for himself any extraordinary proficiency in the art" of physical diagnosis, yet "it was alike natural and proper that he should 'closely scrutinize the foundations of our opinions' and 'rigidly compare them' with the authors we have cited," etc.

If we turn to the pages of those who have written upon the subject of physical signs of pneumonia, we cannot fail to perceive the vast discrepancy between the views of those who have treated upon the subject *ex cathedra*. Certainly therefore, an opinion modestly expressed on the subject might have been allowed to pass without receiving any very "rigid or extended examination, especially as we had promptly disclaimed at the onset, the slightest claim to expertness on this branch of the subject. If we were in error no amount of learning or logic was necessary to convince the reader that it proceeded from ignorance, for the simple reason that the experience of the reader himself could alone decide the question really at issue, viz: Whether the physical signs of the so-called Idiopathic Pneumonia were present or absent in the malarial form—a variety whose auscultatory phenomena no authoritative teachers of physical diagnosis have ever yet made the subject of special study, and of which very few of them have apparently observed a single example. We think, therefore, that our critic must be mistaken in respect of this being one of his motives for reviewing. This is hardly a reasonable or legitimate apology for the tedious infliction which he has bestowed upon the time and patience of his reader.

3rd. Another motive assigned by our reviewer for his elaborate effort is, that we have not correctly described the symptoms of the disease.

As we shall presently see that in many of the principal points concerning the symptomatology of this affection, our critic coincides with us, and that the most important

of those which he rejects in the first part of his "Review," he becomes wiser and accepts towards its conclusion, thus evincing either the beneficial effects of our essay upon his views or the results of the additional experience acquired during the composition of his "protracted paper," we are forced to disagree with him in regard to the real existence of this motive and we must therefore proceed to search through his two hundred and forty pages for another.

4th. Our reviewer now perceives that he has engaged in his task, because we have committed many "grave errors," in regard to the pathology of this disease, and he therefore has "canvassed the essay frankly and freely in the spirit that even Homer should have waked up where he nods." But these cannot be his motives or his "spirit." We say it in all frankness: the gentleman must be mistaken in regard to his motives on this as he clearly is on the points already enumerated. If the views which we have adopted of the pathology of the disease, demanded such an eternal examination as he has bestowed upon this essay, they certainly ought to have elicited a passing notice from him or somebody else long before; for it happens that the doctrines which we have expressed, as we shall soon see, are identical with those held by some of the distinguished authorities, which he most approvingly quotes in other connections, but whose chapters in the same volumes, by a singular coincidence he has entirely ignored, when they directly sustained us and could not aid him, in his strictures, so "frankly and freely" bestowed. This could not then, oh! most impartial, ingenious and tender of critics have been thy motive, these "grave errors" were not as you were or ought to have been aware, mine, but those of thy and my superiors.

Finally, having failed to discover the motive which impelled our reviewer to engage in his interminable assaults upon us, let us turn at last to our Therapeutics. Surely here we must find it as here only could truly be committed the "grave errors" with which we are charged. But no! After having expended all the amunition of his learning, wit,

sarcasm and logic; after having, as he very properly and forcibly expresses himself, "spread out" his "protracted paper to its present extended length," which he informs us was "written by snatches, under the *pressure of arduous professional engagements*, and mostly at night when enervated by fatigue and suffering from impaired health, and all this for the kindly purpose of preventing his brother "Homer from nodding." *He winds up by endorsing our "treatment."*"*

Parturiunt montes; nascitur ridiculus mus! Blind as we have been that we could not truly discern the "symptoms" of the disease; deaf as we have been that we only but rarely could hear "*le rale crepitant;*" so devoid of discrimination that we had failed in its "diagnosis," and so gravely in error that we could not comprehend his or our own "unsound pathology," yet "when Dr. Manson comes to apply his "therapeutics," *it is really pleasing* to witness how the sagacity of the practical physician *shines* forth," that the *indications* are clearly stated, the means advised highly judicious, and that he "takes pleasure in commending them to the *approval* of the profession."

And has it come to this, that for twelve long months our humble contribution—a brief sketch entering into the transactions of a medical society should be held up to the public condemnation, that its most trivial errors should be criticised, its views distorted, and that it should be made the subject of satire and the butt of untimely jest because it was "unsound in its pathology. Surely with a generous critic "the sagacity of the practical physician," might have pleaded in extenuation of the errors of the pathologist, surely with such a one the practice "so highly judicious," that he even could not refrain from "commending" it, might have placed as

*It will be seen however, hereafter, that this is only a specimen of "damning with faint praise," for although our critic speaks in these terms of general commendation of the treatment, his nature soon breaks out in a quarrel with the details, and that which he approves in the abstract he rejects in the concrete.

an offset against our theoretical heresies, the "*clear*" statement of "curative *indications*" have compensated for much that was doubtful or obscure. On the basis, therefore, of this examination of what may be termed the proximate cause of this controversy, the reader will doubtless unite with us in the opinion that our critic has not given a satisfactory account of the motives which led him to engage in it. What then were those motives? We will give our opinion. Bearing in mind the time and labor expended in this production, the minute care with which he has evidently studied every line and word of our essay, the ungenerous constructions which he has placed on its import, the virulence with which he has assailed the most unimportant points, and the eagerness with which he has exposed the most trivial errors, it seems to us perfectly transparent that he has adopted such sinister means to attain a sinister end, and that we shall characterize as an attempted elevation of the reviewer at an injurious expense of the reviewed. His paper bears the most satisfactory evidence on its face that truth, scientific truth, the only legitimate object of scientific controversy has not entered into his design.

We have no disposition to prove ourselves a martyr. Confident of the correctness and value of our views we shall endeavor to support them to the extent of our humble ability, and if in pursuance of this object we shall necessarily expose the short-comings of our critic, be his alone the blame. If he has ventured on the treacherous sea of criticism in a bark too frail to outride the storm, let him beware of the consequences of heedless presumption and reckless daring.

NAME OF THE DISEASE.

Our reviewer not confining himself to the discussion of facts or doctrines, has endeavored to bring our essay into discredit, by carping at the name which we have *chosen* to designate the disease under consideration. Thus he says *

* See Dr. Howard's Review, (N. C. Medical Journal,) Vol. 2, pp. 307, 325, 527, 553; Vol. 3, pp. 264, 266.

this disease is "designated" by us "as Malarial Pneumonia," refers to it as our "Malarial Pneumonia," and characterizes it as "Dr. Manson's Malarial Pneumonia." That an humble member of the profession as ourselves should take the liberty of reforming the nomenclature of the science would be open to objection, and furnish a proper occasion for cavil, we cheerfully admit, but we deny that we have attempted any such innovation on the title of this disease; and what is more to the point, we assert that our reviewer ought to have known better when he charged us with such an intention, and of which facts we furnish the proofs:

1. The reader of Dr. Howard's review who cannot but recollect how often the justly admired work * of the late Dr. Drake has been quoted therein, will learn with surprise that that distinguished author himself employed the same designation years before the appearance of our essay, and obviously for analogous reasons. If the reader will be kind enough to turn to the volume, he will observe the term Malarial Pneumonia twice in the Index, and again that of Malarial Pneumonitis in the body of the work on the second page of his chapter on Bilious Pneumonitis, the identical page from which Dr. Howard quotes in his review.

2. Nor can our critic offer in excuse that he did not perceive that Dr. Drake had indicated this term; for if the reader will again turn to vol. 3, p. 245-6, of the N. C. Med. Journal, being the 231st and 232d pages of Dr. Howard's Review, he will perceive this term quoted immediately from Dr. Drake's work, "The late lamented and eminent Professor Drake, whose great work is said to have no parallel of its kind in medical literature before proceeding to speak of the *methodus medendi* demanded in Bilious or Malarial Pneumonitis states," etc.

The only apology we can offer for this misstatement of our reviewer of our having bestowed a name on this disease is

* A Systematic Treatise on the Principal Diseases of the Interior Valley of North America, by Daniel Drake, M. D. Second Series, Philadelphia, 1854.

that having spun out his production to such an interminable length he forgot in the latter part of his paper the blunders which he had committed in the first. We must therefore despoil our reviewer of the petty advantage he supposed he had gained in sneering at a name which was not invented but merely selected by us as the most appropriate we could find.

In regard to the name of this disease there is perhaps no scourge to which humanity is liable that can boast of more numerous designations. Thus by Triller,[1] Rush[2] and others more recently, it was styled *Bilious Pleurisy*, and the term Bilious Pneumonia has been employed by Stoll,[3] Chomel,[4] Andral,[5] Eberle,[6] Wood,[7] and others. By Quarin[8] it was entitled *Peripneumonia Putrida*. Sauvages,[9] denominated it Synoche Pleuretique; Sarcone,[10] *Fievre periodique pulmonaire;* Laennec[11] Fievre remittente pernicieuse peripneumonique; Jean-Pierre Frank,[12] *Peripneumonia Periodique;* Chapman,[13] *Congestive Pneumonia;* Grisolle[14] and Valleix,[15] *Pneumonie intermittente et remittente et Pneumonie bilieuse;* Alibert,[16] *Fievre Pernicieuse Intermittente Peripneumonique;* Mail-

1 Traité de la Pleuresie, Traduit du laten, Par MceMahot, p 165, Paris 1815.

2 Rush's Sydenham, p. 165, Phila., 1809

3 Médicine Pratique, (1re part p. 8) traduet par Mahon, Paris, 1809.

4 Dictionnaire de medicine, (in 21 vols.) Tome 17, p. 225, Paris, 1827.

5 Clinique Médical, Tome, 3me, p. 254. Quatrieme ed. Paris, 1840.

6 Practice of Medicine, vol. 1, p. 308 fourth ed. Phila., 1838.

7 Practice of Medicine, vol. 2, p, 16, third ed. Phila., 1852.

8 De Febribus et Inflam. comment, p. 326, Vienna, 1781.

9 Nosologie Methodique, Tome 1, p. 399, A'Paris, 1771.

10 Histoire Raisonnee des maladies observees a Naples, traduit, par F. Ph. Bellay D. M. Tome 1, p 213, Paris, 1804.

11 Traité de l'Auscultation' mediate, 3me ed. Tome 1ev. Paris, 1831.

12 Traité de Médecine Pratique, traduit du latin, Par J. M. C. Goudareau, Tome 1, p. 176, Paris, 1842.

13 Benedict's Compendium of Chapman's Lectures, p. 217, Phila. 1846.

14 Traité Pratique de la Pneumonie, pp. 398. 425, Paris, 1841

15 Guide du Medicin Practicien, 3me ed. Tome 1, pp. 437, Paris, 1853.

16 Traité des Fievres Perncieuses Int. p. 57, Paris, 1820.

lot,[1] *Fievre Pneumonique*, and lately, it has been distinguished by Morehead,[2] as *Febrile Pneumonia;* whilst in popular language it has been variously termed, *Lung Fever*, *Head Plurisy*, *Cold Plague*, Winter Fever, etc.

Among the various appellations bestowed upon this malady, that of Bilious Pneumonia, which apparently is most acceptable with American authors, has appeared to us the most objectionable. The functional disturbance of the liver, from whence the prenomen *Bilious* was derived, although frequently and prominently observed in the disease, is yet too often absent to render it a very reliable guide in diagnosis, or to entitle it to the privilege of conferring a name on the disease. In the gravest cases that we have observed, it has occurred that the so-called bilious symptoms were entirely wanting, and in many cases, the evidences of hepatic implication appear too late to assist in framing that prompt decision so necessary in a disease of such rapid progress and fatal proclivity. We know that it was from the undue stress laid upon these bilious symptoms by the most popular writers, that we were led in our early career into the grievous mistake of confounding this affection with the Idiopathic Pneumonia of authors. We believe at this day, from our experience and consultation with younger members of the profession, that from the same cause this error is still often committed, and we therefore ardently hope that this term, the offspring of a vicious and erroneous pathology, may soon be forever erased from our nosology.

On the other hand, the term "*Malarial Pneumonia,*" indicated by one of the most distinguished authorities in American medicine, can lead to no error, either in theory, diagnosis or practice, and is eminently suggestive of the true nature of the affection, whether the pathology adhered

1 Traite des Fievres, p. 41, Paris, 1836.

2 Clinical Researches on Diseases in India, p. 509, second ed. London, 1860.

to by our reviewer or ourselves be adopted. It is clearly expressive of the most important elements in the etiology of the disorder, and denotes the important organs which are the seat of inordinate vascular determination. From these considerations, and in honor of the memory of the illustrious Drake, we respectfully propose this name to the profession. In any event, until a more suitable and comprehensive designation is supplied it at least shall continue to be employed by us.

THE "NOTORIOUS PRODUCTION."

"It is well known," says our critic, "that the production [*our essay*] obtained a very early and wide *notoriety*. Indeed, it was transferred from the advance proof sheets of the Transactions of the Medical Society of this State, to the pages of the Virginia Medical Journal, and appeared there simultaneously with its insertion in the New Orleans Medical News and Hospital Gazette."

In justice to ourselves a brief explanation is here rendered necessary. It is true that the essay *was* transferred to the pages of the Virginia Medical Journal, and the members of the Society present at the meeting at Edenton, will doubtless remember the reason. On that occasion we stated that the article was intended as one of a series of "Sketches of the Endemic Diseases of the Roanoke Valley," then in course of publication in the Virginia Journal, but that as so few contributions had been offered at that meeting, that, in order that the transactions might form a pamphlet of respectable dimensions, we would present this paper for insertion if the Society should deem it worthy of acceptance; whereupon, it was moved by our esteemed friend Dr. Satchwell, that we should be "allowed to publish the essay in the Virginia Medical Journal after it had appeared in the Transactions of this Society."*

*Transactions of the eighth annual meeting of the Medical Society of the State of North Carolina, held at Edenton April 1857, page 14.

Such is the history of the "transfer" of this paper to the pages of the Virginia Journal and the only part which we have taken to procure for it the "rapid and extensive circulation," mentioned by our reviewer.

Our critic is however, so avaricious of praise that he cannot even give a correct account of the reception of our humble essay. It is strange that one so fastidiously hypercritical that he cannot permit a trivial typographical error to escape him, could not find in his vocabulary a word more appropriate and suggestive of the facts than that of "*Notoriety*," to characterize the estimation with which our essay was received. As he possesses such talents for verbal criticism, let us exercise them a moment and inquire what is the common acceptation of the word Notoriety? and as he receives nothing unsupported by authority, let us refer to the highest on the subject by quoting the definition of Webster:*

NOTORIETY, n. (Fr. *notoriete* from *notoire*. See *Notorious*).

1. Exposure to the public knowledge: the state of being publicly or generally known as the notoriety of a *crime*..
2. Public knowledge.

NOTORIOUS, a. (It, and Sp: *notorio*, etc.)

1. Publicly known, manifest to the world; evident; *usually* known to *disadvantage; hence almost always used in an ill sense* as a notorious *thief*, a notorious *crime*, etc.
2. In a good sense.

Or if this should be unsatisfactory to our critic, let us refer to Crabb's classical work on English Synonymes:

"Notorious is *never* used but in a *bad* sense. Men may be noted for their talents or their eccentricities, they are *notorious* only for their *vices*. * * *Notorious* characters are *always shunned*. 'What principles of ordinary prudence can warrant a man to trust a *notorious cheat*'—*South*."

It will be seen therefore, that our reviewer, with an apparent determination that no approval of our essay should find any circulation through the medium of his *critique*, could find no other than this offensive and opprobrious epithet which according to a high authority, is *almost always*

* American Dictionary of the English Language, p. 758.

used in an ill sense, and as the *usual* signification of vice and criminality, and which, according to another, is *never* used but in a *bad* sense, to express the reception which our paper met at the hands of the profession. Although the term is in rare instances, employed in a good sense, yet when we bear in mind that our essay has only been reviewed by our critic to be censured, and that its facts, opinions and doctrines are only noticed to be condemned, the inference would be irresistible with the reader that it had met with the same obloquy to which he has endeavored to consign it. Let us however, ascertain what are the facts, whose mention he has so carefully avoided. Let us see if we have not been dealt with more generously and charitably if not so "frankly and freely" as by our *confrere* and neighbor—Dr. Howard.

We know we incur the liability of being charged by some with heralding our own praises in re-publishing the subjoined flattering notices of our little paper, but we maintain that in a controversy like this, in which every effort has been made by our opponent to bring it into contempt that it is a legitimate mode of defense, to inform the reader of those commendations which it has received from more competent and disinterested sources, and which we proceed to give:

EXTRACT FROM A REVIEW OF THE SOCIETY'S TRANSACTIONS, FROM THE PEN OF THE ACCOMPLISHED AUTHOR, CRITIC AND SCHOLAR, DR. D. F. CONDIE, IN THE AMERICAN JOURNAL OF MEDICAL SCIENCES, OF OCT. 1857, p. 446.

'The most extended and elaborate report in these "Transactions," is that of Dr. Otis F. Manson on Malarial Pneumonia. The reporter examines very minutely the general course and progress ef pneumonia as it usually occurs in malarious districts, its physical signs and the physical changes that occur in the disease, the diagnosis between it and other forms of pneumonia, its cause and nature and the treatment best adapted to conduct it to a favorable termination. The report is one we should like to dwell upon at some length. The author has emitted opinions which are eminently suggestive, to say the least of them, and certainly deserving of a close and candid examination. The correctness of some

of his conclusions may admit of question, still as a *very masterly history of pneumonia* in the form under which it usually presents itself in those whose systems are laboring under the influence of malarial poison *it forms certainly a valuable contribution to pathology.*"

FROM THE NEW ORLEANS MEDICAL NEWS AND HOSPITAL GAZETTE OF SEPT. 1857.

"SPECIAL SELECTIONS."

"The following article on Pneumonia, *as it appears amongst us at the South must prove acceptable to all our readers.*

Practitioners of medicine here are beginning to be aroused to the truth of the proposition, that we have peculiarties of disease in our climate, and that the therapeutics of the North or of transatlantic regions cannot be considered as applicable to the same: and if we could only induce our brethren to follow the bright example of Dr. Manson, and record faithfully their observations the most skeptical would soon be forced to yield acquiescence to the doctrine of educating southern physicians at home.—EDITORS."

Here we are honored by the Editors by copying the article entire in the same number. These were the only public notices taken of our essay at the period when Dr. Howard's Review was penned of which we are cognizant. Had it met with any unfavorable reception it doubtless would have been noticed by our reviewer. The reader may now judge if he has correctly stigmatized it as a *notorious* production.

SYMPTOMS OF MALARIAL PNEUMONIA.

Our reviewer next proceeds to examine the features of the disease "as portrayed by us," and to the reader who has not perused my paper, it would appear from the separate examination to which he has submitted each symptom, that we consider them all and singular as diagnostic, and acting on this presumption, he writes a book on that which mercifully to the reader and pertinently to the subject might have been compressed into a few pages. We shall not follow him, but shall only glance at the few important points upon which we distinctly take issue.

1. The stage of invasion. We have said that "Malarial

pneumonia attacks suddenly, being almost invariably ushered in by a chill, which is frequently of a severe intensity, and attended with rigors of variable duration. In very grave cases, however, the system is prostrated almost beyond the capability to react, and a prolonged cold stage is the result. Death, however, rarely is produced from this cause in the early stage, but fever, more or less developed, soon ensues. In some cases the patient seems for hours, and even days, to hover between the state of chill and febrile excitement." This, the *initial chill*, does not usually in my field of practice differ in *mild cases* from the chill of the Idiopathic pneumonia of writers, but in grave cases, of which in the space of twenty years, we have seen numerous examples, and which are more frequently observed in more southern latitudes—the cold stage from the commencement is *unlike* that of the simple form as described in these respects, viz:

1st. In its more prolonged duration.

2nd. In its danger and severity.

3rd. In the patient being usually insensible of its existence.

These important points have been either entirely ignored or only cursorily and imperfectly noticed by "the modern standard authorities." They have not been mentioned by Drake,[1] in his brief and hurried sketch of "Bilious or Malarial Pneumonitis," or by Wood,[2] in his chapter on the same subject, have not even been alluded to by Eberle,[3] and are totally omitted by Grisolle in his article on Bilious Pneumonia, or in that on Intermittent and Remittent Pneumonia in his celebrated *Treatise*,[4] or in his *later* work on *Internal Pathology*.[5] This grave and important stage of the disease has however been *noticed* by many reputable con-

1 Op. cit. p. 869.
2 Op. cit. vol. ii, p. 16
3 Op. cit. vol. i, p. 308.
4 Op. cit. pp. 398, 425.
5 Pathologie Interne, Tomé premier, pp. 361-2, Paris, 1857.

tributors to our southern periodical literature, but by none so truly and graphically delineated as by the distinguished Dr. Sam.'l A. Cartwright, of New Orleans. We beg leave to transcribe this admirable description by this talented and experienced observer, which would alone entitle its author to an elevated position as an accurate clinical observer, feeling assured in so doing we are rescuing from oblivion a chapter which will not only repay the perusal of the older members of the profession, but which will be to the inexperienced a valuable aid in the study of southern diseases.

CARTWRIGHT'S* DESCRIPTION OF THE COLD STAGE OF PNEUMONIA BILIOSA.

"The approach of bilious pneumony is generally announced by the occurrence of a pain more or less acute in some part or other of the body, as the jaw, teeth, the ear, head, arms, legs, side or hips. In other cases it commences by a general soreness of the flesh and aching of the limbs with occasional wandering or darting pains. In some it begins with, but is more often attended by a vomiting or purging or by both—some degree of pain in the side, hence the common name of this disease—*bilious pleurisy*. Catarrhal symptoms most generally attend its onset. These premonitory symptoms continue from one hour to three or four days before the disease formally commences and displays its true charactor. It sometimes however at once commences without having been preceded by any precursory symptoms. In either case it begins with a chill or coldness of shorter or longer duration. When the patient feels very cold and shivers, we may look with certainty for a hot stage or re-action in one two or three hours. When, however, the patient *does not complain* of being *cold* or only slightly so, while the surface of his body, particularly his *extremities* are *actually cold* to the *touch*, we know not when to expect the reacting stage. The *cold plague* is the popular name in this section of the country for cases of the later description, which if not so scientific as *pneumonia typhoides* is not calculated to *lead* to *error* in *practice*. As the cold plague, *bilious*, and *head pleurisies* of the common people appear to be produced by the same causes, preceded by the same premonitory symptoms; as they occur at the same season and often attack simultaneously different members of the same family, I have considered them as the same disease and embraced all under the name *pneumonia biliosa*. We had just come to the common cold stage wherein the disease assumes

*Medical Recorder, vol. x, pp. 63–65, Philadelphia, 1826.

different forms and is soon destined to receive different popular names. A natural division here takes place.

1st. coldness with a sensation of coldness.

2nd. Actual coldness, with little or no sensation of coldness.

Let us pursue the first division. The patient complains of being cold and chilly; of pains in his limbs, head or breast, and of achings in the bones. He breathes hard, has some cough and occasional sharp, darting pains through his chest. The darting pains continue longer, are more acute and at length become fixed in some part of the thorax. The cheeks become flushed, the head aches, and the patient about this time either loses all his chilly sensations entirely—the skin becoming universally hot and the pulse active, or he still retains some degree of chilly feeling, and at the same time begins to feel an inward heat and burning which make him restless, anxious and oppressed. Sometimes the sensation of cold leaves him entirely for a few minutes, or even an hour or two, and then returns. Often the sensation of coldness is felt when the surface is actually dry and hot throughout, or hot and moist from a perspiration which occasionally breaks out and dries up again. The extremities are sometimes cold when they are not felt to be so by the patient and *vice versa*. The relation between the sensations of heat and cold and the actual heat or coldness does not exist as in health. * * * * * *

2nd. *Actual coldness with little or no sensation of cold.*

The patient generally has catarrhal symptoms, looks dull and insensible and is often comatose. There is as in the former division a great *tendency of the bowels* to assume a *watery purging*, and the strongest cathartics as well as the milder are followed by mucous or serous discharges or of the *lotura carnium* description. The urinary secretion is suspended or diminished. There is often a hoarse rattling cough, with or without expectoration—the expectorated matter is generally bloody. The number of respirations in a minute is mostly less than in health. The intervals of time between each expiration and inspiration is scarcely ever the same. Pain in some cases is entirely absent and when it is present, it is never so severe as in the preceding division of the disease.

The extremities are always cold, and indeed the whole surface of the body except about the head and breast is frequently cold, but the patient (unless for a little while when first attacked) *rarely complains of feeling much cold*. The nervous sensibility is often so much impaired, that the *patient feels neither cold* or *pain*. The tongue is dry and black in some cases while in others it differs but little from a healthy appearance. The pulse is small and tense or small and compressible. Determinations of blood to some important part of the system, as the brain, the stomach, bowels, liver or throat generally happen in a very short time after the attack, and inflammations are formed, which if not removed, prove fatal between the first and twelfth days. The course which this division of the disease

pursues is very much influenced by the change which may take place in the pathological state of the system, after the brain, liver, stomach or any other important organ becomes seriously affected. For when the brain, liver or any other important organ becomes inflamed, that pathological condition of the system which consisted in torpor and insensibility, sometimes gives way to a very different condition, viz: general reaction with a feeling of heat accompanied with acute pain, more often, however, only a partial reaction accompanied with a sensation both of heat and cold and with more or less pain, takes place; while in some cases the insensibility and torpor are so great that the system is unable to rise from its oppression, the surface continues cold and insensible, the extremities become more shrivelled, the cutaneous veins become empty, the blood more black and dissolved and is entirely prevented from becoming arterialized by the increasing organic and functional derangement of the lungs. These different pathological states of the system therefore attend the progress of this second division of the disease, viz: reaction, either general or partial, or an absence of all external reaction whatever."

Such is the minute vivid and truthful description of the cold stage in the graver cases of the disease written thirty-four years ago, by one who had the most ample opportunity of studying southern diseases at the bedside. Such are the features of a stage of this malady which have been considered unworthy of notice by Wood, who Dr. Howard declares "has given a faithful account of this variety of Pneumonia;" which have not even been hinted at by Eberle, who in "the opinion of La Roche (endorsed by our critic) has embodied all that need be said on the subject." These are the fearful phenomena of a stage which M. Grisolle, whom our reviewer has termed "the greatest of all modern standard authorities on the subject of pneumonia," has only characterized as "being similar to the ordinary violent chill of frank pneumonia," and which in the succeeding paroxysms consist only of "slight shiverings" which are usually partial and which are absent in many patients."*

But lest our critic should not be satisfied with the evidence which we have presented of those occurrences, we beg leave to cite other southern authorities upon the subject. Dr. Gibbs† of Columbia, S. C., in an interesting article up-

* Tracte de la pneumonie, p. 432.

† American Journal of the Medical Sciences, vol. iv. N. S. p. 290.

on this disease, has the following observations on this stage; "The more violent cases being taken with a chill and cold skin, and dying often without any reaction, it is sometimes called the *cold plague*. Where the disease is violent in its attack the patient suddenly becomes *cold* and pulseless, lethargic and often insensible without *previous complaint*, and I have known cases dead or die within three or four hours from being apparently well.

Dr. P. H. Lewis* in his "Medical History of Alabama," in his remarks upon this stage, says: "The patient first complains of being weak, drowsy, but unable to sleep, with a sense of constriction across the chest, the skin becomes cold, damp and shrivelled, breathing labored with all the normal respiratory sounds merged in one loud continuous mucous rale. As the disease advances a dark, red spot appears upon the cheek, the patient expectorates a *bloody frothy mucus* every symptom of thoracic *congestion* increases with fearful rapidity, the function of respiration is at last confined to the bronchia and trachea, the eye becomes glassy and protruded, clearly expressive of deep physical agony, but an unclouded reason, and in this form the disease proves fatal in from twenty to fifty hours."

Assistant Surgeon, R. H. Coolidge, in his "report on the diseases of Fort Gibson,"† observes: "This disease is sometimes rapidly fatal, being ushered in with a chill during which the brain or lungs or both, become fatally congested, the patient never rallying. In less severe cases there is usually a chill followed by fever complicated by pneumonia, which is not unfrequently double."

Assistant Surgeon, R. Glisan, in his report on the diseases at and near Fort Arbuckle,‡ remarks that "Pneumonia was often ushered in by a chill from which the patient would *sometimes never react*, others assumed an actively

* New Orleans Medical and Surgical Journal, vol. iv, p. 30.

† Statistical Report on the Sickness and Mortality in the Army of the United States, from January 1839, to January 1855, p. 269.

‡ Army Report cited, page 282.

inflammatory character from the first, but more frequently a depressing influence on the circulatory system was observed throughout the whole course of the disease."

It is unnecessary to quote more in this connection. Such is the cold stage occurring in the graver cases of one of the most frequent and fatal diseases of the south as depicted by those fresh from the conflict with the deadly malaria of the south.

But this stage does not generally present these grave features in the Roanoke Valley, a higher latitude than that in which the foregoing observations were made; with us the subtle cause of the malady usually exerts an energy less potent in its manifestations and less destructive in its results. Therefore in our essay in which brevity was necessary, it has been only rapidly noticed, and the reader has been referred to our article on Remittent fever for further information concerning it.

THE REGULARLY RECURRING COLD STAGE OF MALARIAL PNEUMONIA.

But we have made additional observations in relation to the cold stage in this disease which we regard as of the highest importance. These observations do not rest upon the authority of any one, but are the result of our personal experience of the disease at the bedside, an experience extending through nearly twenty years in a malarial region and derived from attendance on a great many cases in our own practice, and that of our friends. We quote the description as given in our essay.

"The febrile action presents decided peculiarities, being usually distinctly paroxysmal and remittent. The remissions are, however, sometimes obscure, and an active fever exists during the whole day and night. On watching the patient closely, however, a coolness of the extreme parts will be almost invariably observed, generally occurring daily and during the morning hours. This reduction of temperature may be confined to the ends of the nose, toes and fingers, either separately or combined, and in grave and rare cases, may extend over the entire extremities, or even the whole surface, amounting to a state of

collapse. This coolness of the skin is not generally felt by the patient, but on the contrary, when it is present, he often complains most intensely of sensations of excessive internal heat, soliciting the introduction of cold air into the chamber; and, as we have witnessed, wishing the doors and windows to be opened, and the fires extinguished, when the thermometer stood below the freezing point near the bed of the sufferer. A marked increase of fever follows this insensible chill, which continues to increase in intensity, until an exacerbation, more or less perfect, is developed. The pulse which had been very frequent and contracted in the chill becomes expanded, acquires force, and sometimes, though rarely, becomes full or tense. The term *compressible* applies to the usual condition of pulse, and the idea entertained on its careful examination is, that the heart is acting with only a seeming force, and not with real vigor. In some few cases, the pulse has deen observed to be *nearly normal*, or *morbidly slow.*

The respiration in the chill is more frequent, aud the dyspnœa more urgent than in the exacerbation.'

The reader will here observe that we have again remarked that it is only in the graver cases that the diminished temperature of the surface is most strongly marked, and that we have stated that in the cases where the fever remits and in those in which the remissions are imperfect and an active fever exists during the twenty-four hours that the cold stage may be simply characterized by a simple refrigeration of the extreme points of the nose, toes and fingers. Regarding this disease as Remittent fever with sanguineous determination to the lungs, we therefore referred the reader, in treating of the diagnosis, to our article on Remittent fever* for further information in regard to this stage. On reference thereto the chill of Remittent fever is thus described :

"This, according to my observation, never occurs between the hours of 9 P. M. and the rising of the sun on the following day, but usually between the hours of 8 A. M. and 12 M. and occasionally between 6 and 8 P. M.

At or near these periods the watchful attendant will perceive a sensible diminution of temperature of the extreme parts, viz: the nose, toes and fingers, or the whole hands and feet will be found below the natural

*Transactions of the 7th Annual Meeting of Med. Soc. of N. C. 1856, p. 48.

standard, being cool and damp, the rest of the surface retaining its febrile heat more evident in the cerebro-spinal and epigastric regions. In this condition the patient *rarely* complains of any sensation of cold but often of heat, desires to be fanned, the clothing to be removed and entreats for cold drinks."

The correctness of this description is of course contested by our reviewer—but its truth shall be easily and completely established, not only by the assistance of authorities, but by the admissions of our critic himself. In his Review* the following remarks occur:

"We have now reviewed at great length, Dr. Manson's account of the leading symptoms, and dwelt particularly on those features that are considered distinctive of "malarial pneumonia;" we have carefully compared it with ordinary simple pneumonia as it is so faithfully described by many of the best modern writers on the subject: we have endeavored to separate and define those symptoms that truly belong to the former and attempted to show that others adduced by our author as diagnostic do not in fact form an essential part of its history; and what is the conclusion to which we have been naturally led? Why that some of the leading phenomena of remittent fever are engrafted upon and blended with the rational symptoms of ordinary pneumonia, and that those symptoms thus united with, and complicated by the tokens of an accidental affection represent and portray the so-called "malarial pneumonia." We are not surprised then that when Dr. Manson comes to unfold his views of the "cause and nature of malarial pneumonia," he should be led to declare that "the reader who has had frequent opportunities of observing remittent fever at the bedside, or those who have not, who have honored the writer (Dr. Manson) by a perusal of his imperfect descriptions of that disease, cannot fail to perceive the close resemblance between the phenomena presented by that affection and the disease under consideration; indeed the *similitude is almost perfect with the addition of the signs and symptoms of the thoracic lesion.*" *What* thoracic lesion?" *Pneumonia?* Precisely, it is *true pneumonia* complicated by the impression of a malarial law, and this readily explains the fact that *Dr. Manson's "malarial pneumonia"* offers so many points of natural and striking resemblance alike in its onset, march, leading phenomena and termination with the ordinary forms of pneumonia with which we have compared it."

The reader here perceives that Dr. Howard declares that in this disease the leading phenomena of Remittent fever are

*N. C. Med. Journal, vol. ii, p. 423-4.

"engrafted upon and blended with the rational symptoms of *ordinary* pneumonia."

For the sake of argument, for a moment we will admit this, as in order that we may prove the correctness of our delineation of the *cold stage of malarial pneumonia*, it will only be necessary to establish what are the symptoms of the cold stage of Remittent fever. We will recount to the reader *where we first learned them.*

A CLINICAL LECTURE ON THE CHILL OF REMITTENT FEVER.

When we first came to practice medicine in the Roanoke Valley, our chief information in regard to remittent fever was derived from the popular text books of that day, viz: the treatises of Eberle, MacIntosh, Dewees, Thomas, etc., the former being particularly recommended to southern students. As this fever was quite prevalent the next autumn, their pages were diligently restudied, in the expectation of receiving a summons to a case. The ground was fully occupied by experienced physicians, and we had to wait some time in vain, but at length we received a call to attend a sick overseer on a neighboring plantation, whom we found in the following condition. On approaching our patient who had been ill for several days, we observed that he was very restless and could lie but a few moments in the same position. His respiration was anxious and oppressed; his eyes suffused; his head hot; his tongue dry and heavily coated; his pulse quick, frequent and of diminished volume. He complained of violent headache and pain in his loins and limbs and was extremely thirsty. On conversing with his wife aside, in order to elicit a history of the case, we incidentally remarked that "her husband had a very high fever!" Upon which, with a look of disapprobation, she replied, "that we were mistaken, that her husband had a chill!" We smiled incredulously, but thinking perhaps, that we might have been led into error from a too hasty examination, we again drew near to our patient and feeling that his forehead, chest and abdomen were very

much above the natural temperature, we inquired "if he felt cold?" To which he answered in the negative, saying that "he was too warm;" that he "felt burning up inside" and begged to be permitted "to take off some of the covering and drink as much cold water as he wanted!" We now looked triumphantly at his wife who in no wise disconcerted, replied. "Doctor feel his toes and nose!" We did so, and to our astonishment, found them as well as the extremities of his fingers, to be as cold as the dead.

Such my readers, are the symptoms daily observed in a malarial epidemic, and which, for want of a better term, we have designated as the "Insensible chill of Remittent fever," and which we thought to be perfectly familiar to every man, woman and child in a malarial region, but which are not as fully described as in this simple recital, as far as our researches extend, by any standard author, either living or dead, in ancient or modern times.

This stage is sometimes, however, not even so well marked as the case detailed. Occasionally it is only characterized by a slight coolness instead of coldness, of the extreme parts, and in other cases it is only manifested by the comparative inequality of heat existing between that of the head and trunk and the extremities, the succeeding fever being usually intense and prolonged in an increased ratio with the distinctness of the cold stage.

But our critic, greatly to our astonishment, contests the existence of these well and widely known symptoms, although admitting that in his form of pneumonia "the leading phenomena of the Remittent fever are engrafted upon and blended with the rational symptoms of pneumonia." He avers that he is unable to verify from his own experience, a part of Dr. Manson's description of the symptoms that accompany the daily paroxysmal and remittent course of the febrile movement in this form of pneumonia, that he does not remember to have witnessed *this* particular condition, this "*insensible chill*," that he "supposed that one *generally feels cold* when suffering from a *chill*, and although not ig-

norant that in *certain forms* of *periodic fever,* those usually termed malignant, *pernicious* or *congestive,* and more especially the *algid* variety, the patient may complain of heat either internal or external during the cold stage, although to the touch of others his body may present even an icy coldness; but in the simple chill of ordinary intermittent and *remittent* fevers, the sensation *of cold* is *often out of proportion* to the *actual loss of surface heat,* and there may be heavy complaints of a feeling of severe cold when to the hands of bystanders there is abnormal heat, "and that it is perhaps in consequence of his (our) *peculiar views* in regard to the character of the chills of remittent fever and their daily occurrence as much as any thing else that Dr. Manson is induced to declare in this production, that there cannot be found in any standard work a correct description of its characteristic features as it now presents itself," that it has been four years since these ideas were first *set afloat,* and that they have been given more than usual prominency, yet no one so far as we (he) can learn, has verified their accuracy.

Whilst cheerfully admitting that in the chill of intermittent fever, the sensation of cold may be intense, and that even in the cold stage of remittent fever the sensation of cold is *sometimes* not only experienced, but may in *rare cases* be "out of proportion to the actual loss of surface heat," yet we contend that the sensation of cold *after the initial chill* in the large majority of cases of remittent fever occurring in this region is not *felt* by the *patient,* and in those cases attended with vascular determination to the lungs constituting this form of pneumonia, we do not remember to have witnessed a single instance in which, after the initial chill the patient has even been aware of the presence of the cold stage. But we have premised that Dr. Howard in admitting that "in certain forms of periodic fever—those usually termed malignant, pernicious or congestive, and more especially the algid variety, the patient may complain of heat, either internal or external, during the cold stage although to the touch of others his body may present an icy coldness," and

also in declaring that in this disease "the leading phenomena of Remittent fever are engrafted upon and blended with the rational symptoms of pneumonia," has unwittingly yielded all that we contend for, for it is well known that remittent fever as it has appeared during the past twenty years, or more in this region, has been emphatically a congestive disease, that it has differed only in *degree* and *not in kind*, from the pernicious fevers of authors, the cold stage being only more protracted and prominently marked, and the internal congestions more intense in the latter; that in fact they are *one* and the *same* disease, it being not uncommon for a mild case of remittent in the second or third paroxysm to assume the worst features of the algid or pernicious grade, and the latter in turn, assuming the benign character of the former. These facts will not be contested by any familiar with the literature of the disease. M. Maillot* observes in his justly celebrated work, "I think that it remains *demonstrated* according to the *analysis of the symptoms* that the pernicious fevers only differ from the ordinary intermittent fevers by the violence of the *congestions*," and M. Broussais† remarked in nearly the same language, "the fevers which are called pernicious or malignant, do not differ from other fevers except in the violence and in the danger of the *congestions*." It was clearly from a knowledge of these facts that Alibert, Laennec, Maillot, (Op.cit.) Bonnet‡ and others have classed the disease with "*Les Fievres remittentes pernicieuses peripneumoniques.*"

In declaring, as we have, that the cold stage of our common remittent fever has been very *imperfectly* described by any modern standard authority, let us not be understood as asserting that a regularly recurring chill has been alto-

*Traite des Fievres Intermittentes Par F. C. Maillot, p. 42, Paris, 1836.

‡Principles of Physiological Medicine, by F. J. N. Broussais, translated from the French by Isaac Hayes, M. D. and R. Eglesfield Griffith, M. D., p. 449, Phila., 1832.

†Traite des fievres Intermittentes, Par Auguste Bonnet, D. M. P., p. 53 2me, ed., Paris, 1853.

gether unnoticed by those who have treated the subject. In noticing this stage M. Maillot* observes, "According to the greater or less distinctness of the paroxysms M. Baumes has established three series of remittent fevers, and *clinical observation confirms this important distinction.* "The first comprises all those fevers in which each paroxysm commences with a chill; the second includes all those in which the accessions commence with a *simple refrigeration of the extremities and nose*, or with a cough more or less severe, and the third comprises all those in which the paroxysms are not announced either by chillness or coldness or partial reduction of temperature and are only remarkable for the return of fever, an increase of heat and other febrile symptoms which decline after reaching their highest degree of intensity." M. Nepple† merely observes of this stage that the chill of remittent fever is ordinarily slight and superficial. When it is violent it announces the greatest danger and that fears should be entertained that the existing inflammations and congestive irritations might increase to a fatal intensity," and that "the paroxysms are *ordinarily* preceded by a *shivering* or *coldness of the feet.*

M. Grisolle‡ briefly describes the stage thus: "the exacerbations like those of an ordinary intermittent are announced by chills or a simple coolness of the body, particularly marked at the extremities where the skin often assumes a bluish or livid color.

Wood§ after alluding to the initial chill has these few words on the subject: "Another paroxysm of fever then takes place, *sometimes* like the first, beginning with a *chill* and subsibing with *perspiration*, but *frequently* also *without either the one or the other.*"

*Traite des fievres, p. 165.

‡Essai sur les Fievres Remittentes et Intermittentes Par P. Fiederie, Nepple D. M. P, p. 128, Paris, 1828.

†Traite elementaire et pratique de Pathologie Interne par A. Grissolle 7me ed. p. 159, Paris 1857.

§Op. cit. i, 266.

Drake* in his work which in many respects is the most valuable which has been issued from the press of this country, has signally failed in his description of the chill of remittent fever. He remarks: "If we suppose an ague-shake to be reduced to a mere *chill*, but the *subsequent*(?) hot stage aggravated and prolonged we shall form a just conception of the relations in symptomology between intermittent and remittent fevers." That the chill may or may not amount to shivering; the patient now becomes *thirsty*, or if so *before*, becomes *more so*, his pulse increases in frequency, and his headache grows worse. In a few minutes or an hour or two the chillness ceases and is succeeded by febrile heat, etc., and that after continuing in this state of fever which is succeeded by the morning's remission then an increase of *thirst*, *headache* and frequency of the pulse usher in a second chill which instead of being more, is often less violent than the first.

THE RESPIRATION IN THE CHILL.

Our reviewer has the following remarks on this symptom: "Dr. Manson states that the *respiration* in the *chill* is more *frequent* and the *dyspnœa* more *urgent* than in the exacerbation. The peculiar condition above noticed in which a coolness of the extreme parts is said to be daily and almost invariably observed during the morning hours and in which there are great complaints "of *excessive internal heat*," is the one we suppose to which reference is here made. This is the insensible chill, and is followed by a marked increase of fever. As we do not remember to have witnessed this particular condition, this "insensible chill," during the march of malarial pneumonia, we can neither affirm nor deny the correctness of the above statement in regard to the respiration and the dyspnœa at that precise period in the progress of the disease. We suspect however, that the peculiar state designated by Dr. Manson as the "insensible

*Op. cit. 95, 96.

chill," is in a great many instances at least, but the simple remission of the fever. According to our observations, after several paroxysms of remittent fever have occurred—usually from three to five—it is *excessively* rare for the febrile exacerbations to be preceded by a chill or even by rigors. . . . . During the chill proper, in both varieties of this fever just mentioned, the respiration is generally a little irregular and somewhat hurried, but on the succeeding exacerbation of the fever it becomes regular and still more accelerated." "It may be urged that during the period of chill the lung undergoes increased congestion and that *a priori* the respiration must be more accelerated at that time. But this argument *assumes* that the *congestion abates* during the succeeding exacerbation, and therefore *begs* the question." It will be seen that our reviewer declares that in the chill proper, i.e. the sensible chill, the respiration is less frequent than in the exacerbation, that it is *excessively rare* in remittent fever after three to five exacerbations have occurred for the febrile exacerbations to be *preceded* by a *chill*, and that he does not *remember* to have witnessed this particular condition, the "insensible chill," that is a *cold stage unfelt* by the patient at all, either in ordinary remittent fever or malarial pneumonia. That a man of talent and experience, as our critic assuredly is, should make the declaration that in the ordinary remittent of this region that a chill or cold stage cannot be present without the knowledge of the patient is as novel as it is to us inexplicable. Evincing as it does, the most superficial observation and imperfect knowledge of the disease, we might here rest the subject and on this issue alone submit the correctness of our descriptions to the judgment of the reader, but as our critic has endeavored to sustain his assertions by an appeal to reason and authority, let us examine both and ascertain on which side they preponderate.

It would be reasonably supposed *a priori* as our critic intimates, that during the period of chill in which the lung undergoes increased congestion, that the respiration must be

more accelerated, nor does it "beg the question," but simply declares a fact, that in the exacerbation the congestion abates. Look at the patient in a state of chill, in that more perfect grade of the disease usually termed a congestive or Pernicious cold stage; the blood has forsaken the extremities, and seems almost in a state of stasis in the internal viscera, and sometimes in such quantities as Drake* observed, as to suspend the action of some of these great organs, and by its apoplexy occasion the death of the whole. Would it not be a rational presumption, that if this stage of undue determination of blood, this *"periode de concentration"* (as the French express it,) should occur in a patient, already the subject of a *"true Pneumonia,"* according to the pathology of our reviewer, that the thoracic oppression, the dyspnœa and increased compensating frequency of the respiratory movements would ensue; and that on the contrary, that in the stage of reaction, when the blood retracted again from the centre to the circumference, thus in a measure disburdening those organs, that the respiration would become less embarrassed. Nor are these deductions opposed to facts, but are amply supported by them as observed by the most distinguished authorities.

In all febrile chills, inquires Broussais† is there not cephalalgia? Is there not dyspnœa and cough? And again in another work‡ he truly observes, *"the obstacle* to the *circulation of the blood* always temporarily exists during the *chill*, because there is constriction of the heart, the two venous systems also swell at this moment, not being any longer able to readily empty themselves into the heart which does not permit itself to be dilated. *Examine patients at this period* and you will find them with *short interrupted breathing*, the pulse contracted, the heart convulsively laboring instead of freely dilating and contracting; they will all complain

*Disease of Interior Valley, N. A., 53.

† Histoire des Phlegmasies. Tome premire, p. 130. Quatireme ed. Paris, 1826.

‡ Principles of Physiological Medicine. (Transl: cited) p. 454.

of a kind of *oppression of the chest*, somewhat resembling asthma, and you will often observe in them short paroxysms of dry cough, depending on the accumulation of blood in the pulmonary vessels."

"During the cold stage," says Dr. Condie in his note on typhoid Pneumonia,* as he terms the disease, "the Respiration is *short* and oppressed."

But it is unnecessary to multiply references on this point. Let the reader bear in mind that the cold stage is the stage of danger in this disease, the stage to whose prevention our remedies are chiefly addressed, the stage in which the internal congestions are most intense, and which, if arrested, usually places his patient in safety, and we will have attained our object in dwelling upon this branch of the subject.—Let it not be supposed that in insisting upon the existence of a cold stage in this disease, we are endeavoring to magnify its importance in other respects. When it is considered that it constitutes such a frequent symptom as to form a portion of its natural history, that it is one of the most important signs in forming a diagnosis between it and other forms of disease classed under the generic term Pneumonia, its value cannot be too highly appreciated. We know that we can candidly and truly state that in no instance where we have had an opportunity of remaining twenty-four hours with a patient laboring under this disease, have we failed to detect it.

CASE OF URÆMIC ECLAMPSIA OCCURRING IN A MALE, THE SEQUEL OF SCARLATINA.

BY JAS. H. DICKSON, M. D. OF WILMINGTON, N. C.

I am induced to report this case in consequence of its novelty in my experience, and as calculated to confirm that Pathology of Puerperal Eclampsia which refers it to Uræmic poisoning.

*Watson's Practice, 2nd Am. ed. p. 613

The subject of the case is a stout boy of ten or eleven years old. In November last I was called to see him in consequence of a marked drowsiness, almost amounting to stupor, which had come over him a day or two before my attendance was desired. I found him oppressed with drowsiness, from which he could be roused by speaking to him in a loud tone, but into which he would almost immediately relapse. There was a puffiness or œdematous intumescence of the face, which induced me to suspect that the case was the sequel of an attack of scarlet fever, and upon inquiry, the mother recollected, that about a fortnight before he had a slight eruption, but was so little effected by it as not to take his bed for it. Scarlet fever was not suspected, and he was so little indisposed by it, that no medical advice was desired in his case.

At the time of my first visit his urine was scanty and turbid, depositing a dark, sooty material, having much the appearance of broken down blood globules.

With a view to relieve the cerebral oppression, an active hydragogue was prescribed, together with a blister to the back of the neck. These measures seemed to be productive of decided relief. After the bowels had been well moved, the drowsiness disappeared.

A mild saline diuretic of Acet. Potas. and Spts. Nit. Dulc. was next prescribed; and for two or three days the case seemed to be progressing favorably. The urine however, still remained scanty in quantity, and highly albuminous, exhibiting for the most part the sooty deposit before refered to.

After a few days, this condition of the urine was replaced by Hœmaturia—clear florid blood, passing with the urine. To meet this sympton, leeches were applied to the region of the kidneys, and an active saline purgative given.

Notwithsntading the copious local depletion and active catharsis, he was taken very unexpectedly with a severe convulsion. With very little intermission, convulsions continued to recur up to the time of my arrival, about an hour

after the first spasm. I immediately opened a vein in the arm, and after about six or eight ounces of blood had been drawn, the convulsions subsided, and did not again recur. A combination of Calomel, Squills and Digitalis was now prescribed for him, and continued until slight ptyalism was induced.

This, followed by tonics, resulted in a convalescence, which led to a speedy re-establishment of his health.

This case corroborates the observation very frequently made, that the activity of the renal disease, bears no proportion to the apparent intensity of the original febrile attack, and would seem to confirm the opinion expressed by many practical writers, that where the cutaneous efflorescence is slight, the blood is less apt to be depurated of its poisonous element, and severe sequelæ are more apt to occur.

The point in the case to which I wish more particularly to refer, is the dependence of the eclampsia upon the uræmic state of the blood, thus confirming the probable correctness of the opinion that the puerperal form of the disease is dependent upon the same condition of the circulating fluid.

Many of the ablest observers and most intelligent pathologists seem inclined to adopt this view of the pathology of Puerperal Eclampsia, and yet there are some who regard the morbid condition of the kidneys as a consequence, and not a cause of the convulsions, an accidental secondary hyperæmia of the kidneys, caused by the convulsion and the hydræmic state of the blood. In the case which I am describing, it cannot have escaped notice that the morbid state of the kidneys preceded the occurrence of the convulsions many days, and whether we admit it to have stood in the relation of cause to the eclampsia or not, it could not possibly have been its effect.

The case may, I think, be regarded as furnishing pretty strong evidence of the dependence of eclampsia on the retention of the excrementitious elements of the urine in the

blood, and as rendering it highly probable that that hypothesis which refers Puerperal Eclampsia to urœmic poisoning is a correct one.

Another point worthy of notice in this case, is the very obvious and decided efficacy of blood-letting in relieving the eclampsia.

A few years ago it would hardly have been thought necessary to call attention particularly to the efficacy of a remedy which would almost immediately have been resorted to with confidence, by every practitioner. But the opponents of blood-letting of the present day are evidently inclined to carry their views and practice to a radical extreme, and it becomes necessary to resist the dangerous counsels of men occupying positions of such extensive and controlling influence as those of Drs. Bennett and Todd, who seem disposed to ignore entirely this useful and indispensible remedy. I do not contend that it is applicable to every case of Urœmic Eclampsia, whether Puerperal or Scarlatinous, or that it is of itself, absolutely curative; but that in cases in which it is indicated, it is a necessary means to guard the brain against injury from the violent convulsive paroxysm, and to place the system in a condition better adapted to be favorably impressed by the action of other remedies.

COMPOUND FRACTURE OF THE ANATOMICAL NECK OF THE HUMERUS.

BY J. B. HUGHES, M. D., OF NEWBERN.

April 4th, 1858.—I was called to see negro man Jacob, aged 26, a carpenter by trade, healthy, temperate, and of spare, muscular habit. I received the following history of his case. Four days previous, whilst wrestling with one of his associates, he was thrown heels up, and striking the ground on his left elbow, with the weight of his body, and

available a servant as ever. The case presented many points of interest to me. For though compound *dislocations* of the joints occur, it is almost always of the elbow, hand, or lower extremity; and compound *fracture* of the joints particularly of the shoulder, is an extremely rare and dangerous injury. In the painful and swollen state of the joint, it was impossible to decide between compound dislocation and fracture of the bone. The extensive arthritis resulting, the discharge of matter, the inflammation and solidification of the fleshy part of the arm required great patience and perseverance to overcome, and the result has manifested in this case, the benefit and importance of conservatism in surgery. Resection of the joint was several times suggested to my mind; but even if his condition would have justified the attempt, his life would have been endangered, and perhaps forfeited, with the prospect of no other good result than the one now attained. Amputation has been Sir Astley Cooper's great remedy for compound dislocation of the knee-joint. He warmly advocated and successfully performed resection for compound dislocation of the elbow; but for the shoulder both of these operations present much greater difficulties in execution, and less chances of success. In a case of this kind anchylosis is the happiest termination that could be hoped for, and it is imperative on the part of the surgeon to "wait and watch," and not imperil the life of the patient by an operation, unless it offers him the only chance of escape from death.

A SKETCH OF AN EPIDEMIC OF DENGUE OR BREAKBONE FEVER, AS IT PREVAILED IN WILMINGTON, N. C., IN THE AUTUMN OF THE YEAR, 1860.

BY JAS. H. DICKSON, M. D.

SYNONYMS, *Dingee, Dunga, Dandy, Bouquet, Breakbone Fever.*

In the foregoing barbarous nomenclature, the curious philologist will be apt to find his ingenuity puzzled and

his industry baffled, in his attempt to trace the origin of a word which has been adopted to designate a very marked and peculiar form of disease, without being furnished with that "*filum labarynthi,*" which its history affords.

It certainly furnishes a rare instance of a word finding its way into scientific treatises from so humble an origin; for it carries with it the evidence of its negro parentage, not patent enough to be discovered by any ordinary process of word-hunting, and yet sufficiently obvious when the inquirer has been started on the proper track.

The West Indian negro gave it the name of Dandy fever, from the stiff gate which it caused its subjects to assume, when suddenly seized with it, as they sometimes were, when passing along the street. When it appeared in Cuba, this name, in undergoing the Spanish pronunciation, was changed into Dunga or Dengue, which it still retains.

This very unique and peculiar affection, has never, so far as I have been able to learn, prevailed in this place before the occurrence of the epidemic of which I shall now endeavor to give some account.

It seems indeed to be an unfrequent visitor of any locality, rarely, if ever appearing, for two consecutive seasons in any place.

The first notice which we have of this form of fever, is in a paper by Dr. Jas. Mellis, giving an account of its prevalence in Calcutta, in the year 1824.

In the latter part of 1827, it made its appearance in the West India islands. In the Spring of 1828, it broke out in New Orleans, and in the fall of the same year it prevailed in Charleston and Savannah. Papers descriptive of the disease as it prevailed in the latter cities, have been published by Drs. S. H. Dickson and W. R. Waring.

It would thus seem to be a tropical or tropicoid disease, and yet if we can rely upon the correctness of the opinion which regards the *so-called* breakbone fever, which Dr. Rush describes as prevailing in the autumn of 1780, in the city of Philadelphia, as the disease in question, or the true

Dengue, it would seem occasionally to transcend its native limits.

Dr. Rush describes the Philadelphia epidemic as a bilious *remittent* fever to which the name of breakbone fever was popularly applied in consequence of the severity of the pains with which it was attended.

Not having at hand Dr. Rush's description of the disease, I am in some doubt, whether to regard that instance, as one of the genuine Dengue, or only as a form of remittent fever, with the usual spinal and neuralgic pains more than usually developed.

Such varieties of remittent fever are not very rare, but they must not be confounded with this very peculiar affection.

The genuine Dengue seems to be a complex malady, combining some or all of the characteristic features of our ordinary autumnal remittent fever, with very marked symptoms of rheumatism, together with, in many cases, an eruption, closely resembling in some instances urticaria, and in others a scarlatinous erythema. Occasionally, the eruption assumed a miliary, and in some instances a rubeolous appearance.

In those instances in which the eruption did not show itself during the progress of the case, the occurrence of cutaneous desquamation at the close of the attack, left no doubt as to its true character.

This form of fever seems to exhibit no very marked prodromata. In some rare instances it makes its approach insidiously, but for the most part it attacks with abrupt suddenness.

A slight chilliness ordinarily ushers in a febrile paroxysm of greater or less severity, accompanied with headache, chiefly in the back of the head, and distressing pains in the loins and in the course of the large nerves in the lower extremities.

The entire cerebro-spinal nervous system, as well as the peripheral extremities of the nerves, as in the great centres gave token of its pathological condition.

In some instances, the chill was of very marked intensity, and the febrile reaction in such cases was apt to be of corresponding severity.

Restlessness and a sense of great debility are apt to be prominent attendant symptoms.

The pains in the limbs and joints described as rheumatic, though for the most part uniform in their resemblance to that disease, were occasionally seemingly capricious in their character, attacking the smaller joints, and now and then, the stomach and bowels, giving the case in these features no slight resemblance to gout.

In our epidemic, an attack of Dengue was by no means uniform in its duration or its intensity. Indeed it ran through every gradation from the mild ephemeron, scarcely requiring any treatment, to a grave form of fever of ten or twelve days duration.

A striking feature in most cases of any severity, was nausea and precordial distress. In some instances the gastric irritability was a very prominent symptom, and one which, by its obstinate persistence, seriously embarrassed the treatment.

It is usual to ascribe the occurrence of this disease to epidemic influence, and in the present state of our knowledge, it is perhaps impossible to assign it a more specific origin.

This epidemic influence or occult cause would seem to have engrafted itself (in our epidemics) on the ordinary morbific cause of autumnal remittent fever, for the cases evidently partook largely of that character, though in some of its features it was almost Protean, for we might, with strict propriety, characterise one case as rheumatic, another as gout, another as scarlatinous, &c.

It seemed to be no respecter of age or sex, all classes being equally liable to be attacked by it.

A very small fatality seems to be a notable characteristic of the Dengue; for though many suffered severely and

some were seriously threatened, I believe no fatal case occurred.

Some of the writers who have given us a description of this form of fever, think that they have discovered in it a resemblance to the yellow fever, in the circumstance of its having but one paroxysm, with a long and delusive intermission, followed in the one case by a return of a fatal exacerbation, and in the other by a febrile paroxysm, which undergoes solution by the occurrence of a cutaneous exanthem.

I am constrained, however, to regard this as a forced and painful analogy. At any rate, such a form of the disease was not observed in the epidemic which I am endeavoring to sketch in this paper.

Instead of the peculiar paroxysmal form of yellow fever, this epidemic assumed the garb of *billious remittent*, with daily exacerbations and remissions.

Its want of fatality, too, is a feature which separates it widely from yellow fever, and the extinction by the occurrence of frost, is equally characteristic of billious and yellow fever.

The most probable conclusion from all our observations and comparisons, would seem to be, that the Dengue is Protean in its phases, and "*sui generis*" in its nature.

Sequelæ—A very striking and somewhat protracted debility was a not unfrequent sequel of the disease.

In some instances, among children, a paralysis in the lower extremities occurred, and was of considerable duration; but I believe this serious sequel of the malady has not been permanent in any instance. Dr. W. G. Thomas informs me that several cases of this kind fell under his observation, all of which have recovered or are convalescing.

The occurrence of such a sequel of the disease as this, indicates that the nervous centres bear very largely the onus of the disease, and exhibits an intensity of action of

the morbific cause, far exceeding the action of the cause of most other forms of fever upon the spinal axis.

When paralysis occurs as a result of convulsive-remittent fever in children, it almost invariably assumes the form of hemiplegia, and is generally of very transient duration.

Treatment.—Many of the milder cases were treated by the exhibition of a mild aperient and a sudorific anodyne. The severer cases seemed to call for the treatment which has been found needful and appropriate in our ordinary form of billious fever. A mercurial cathartic (generally a pill of mass. hydrarg.) followed by a saline aperient, or a dose of calcined magnesia, was administered at the invasion of the attack. This was followed by the use of sulph. quinine, with or without the addition of an opiate as circumstances seemed to indicate.

In the large majority of cases, the opiate was found indispensable, for in by far the larger proportion of the cases, the spinal and articular pains were decidedly pronounced and called loudly for their administration.

Diffusible stimuli were found useful in some cases, in which unusual debility and prostration occurred; but the great mass of the cases were conducted to a satisfactory convalescence by the use of mild tonics.

SELECTIONS.

Practical Medicine.

DIPHTHERITIS.

BY C. A. HARTMANN, M. D., CLEVELAND, OHIO.

THE disease now generally designated by this name, has been brought forward as a new affection, and largely discussed during the last two years, especially in France, England and America. It appears to have been frequently confounded with croup, gangrenous and scarlatinous angina, and other affections of the throat; even Bretonneau, who principally initiated, in 1821, the recent consideration of the disease, did not distinguish it clearly, giving it the names diptherite, croup, angina maligne, angina gangreneuse, promiscuously. According to him, it is the same with the Egyptian Disease of the Greeks. Dr. Baird had previously in this country recorded the particulars of an epidemic that occurred in New York in 1771. He described it under the name of Suffocative Angina. Other older names applied to it are Cynanche Maligna, Scarlatina Anginosa (in America often used up to the present day), Morbus Strangulatorius (Dr. Starr, 1748), Fothergill Sore Throat, Throat Distemper, Malignant Sore Throat, Malignant Angina, Membranous Angina, etc.

Hippocrates seems to have been acquainted with it, and a very good description is given by Aretæus. Since then their is no record pointing to diptheritis until the day of Cullen, Huxham, Fothergill, Starr, and others, in the second half of the last century; and although they described it as "a new and separate disorder," it fell again into neglect, until more recently the notices of Baird and Bretonneau were followed by a very extensive epidemic appearance of the disease, it spreading, between the years 1818—57, over France, since 1857 over England, and since 1845 over this continent.

Besides the general name, *diphtheritis, diphtherite, diphtheria,* (meaning an exudation in patches,) a large number of designations are found in the works of recent writers. It is the *angina diphtherit'ca maligna* of Trousseau; *angina couenneuse* of Duche, Bouchut, and other French authors; commonly called *diphtherie* in French; the *plastic pharyngitis* of Porry; the *membranous disease,* commonly called *membranous croup,* of Cotting; the *hogskin angina* of Palmer; *diphtheric, membranous, pseudo-membranous, putrid, malignant,* and *epidemic sore throat, scarlatina,* or *epidemic angina, malignant cynanche,* of other American physicians. Some call it simply *sore-throat*

Diphtheritis proper is eminently fatal, mostly epidemic, but not unfrequently sporadic disease, of a very peculiar character, appearing with a great variety of symptoms, but presenting, as general features, a marked prostration of the nervous system, and the formation of a pseudo-membranous exudation, which always commences with patches upon a congested surface and manifests a particular propensity to attack the mucous membrane of the fauces, spreading downwards and upwards; it is, however, occasionally seen upon other mucous membranes, and even upon the skin. Children suffer particularly, but young persons and adults are not exempted from the disease.

The symptoms, not only at different times and in different locations, but during tho same epidemic and in the same place, are so variable that it is difficult to give a description of them of any general applicability. "In not two cases," says one author, "is there a perfect resemblance, either in the grouping of the symptoms, in their order of succession, or in the degree of their individual symptoms." Some cases commence with fever; in others there is none, or it only appears after some time; there may be a diminished secretion of urine or not; albuminuria is often present, but frequently wanting; so it is with headache, difficult respiration, diarrhœa. Some of the more constant symptoms are general malaise, impaired deglutition, and a very weak, accel-

erated pulse. One fact seems to be pretty well established: the statements of Trousseau and others show that the disease since 1846 assumed a more violent and malignant character, entirely different from what it was in the time of Bretonneau.

The last named physician gave the following description: The disease usually commences in one tonsil, seldom in both; slight fever; white spots on the affected tonsil; enlarging of the cervical glands. Redness surrounds the concretion, and it spreads rapidly to the velum palati, uvula, the other tonsil, and the pharynx. The swelling of the lymphatics either subsides or remains stationary. After some hours or days a ringing cough, dry, or accompanied by a frothy expectoration, announces the extension of the disease to the respiratory organs. There are now irregularly shaped patches of redness, without swelling, coated with a concrete exudation. One or more long, narrow, red streaks extend to the pharynx or trachea; a stripe of concrete matter is seen on the center of each of these streaks, and small, semi-transparent vesicles often appear in the substance of these incipient concretions. The edges of the pellicle are gradually lost in the surrounding mucus, which is no longer viscid but coagulated near the concretion. The latter can be easily detached; it is, however, in such case speedily reproduced being now firmly adherent, often several lines thick, and changing its color from a yellowish-white to yellow, gray, and finally to black. The subjacent surface is usually of a slightly red tint, more vivid at the periphery of the patches, and sown all over with points of a deeper red color, through which point the blood readily transudes. Now the alteration of the organic surfaces becomes more manifest; often concrete matter is deposited into the very substance of the mucous membrane; there is a slight erosion, and sometimes echymoses, in points exposed to friction, or from which the avulsion of the concretions has been attempted. The corrupted exudations exhale an infectious order. If circumscribed, they appear depressed, from the œdematous swelling of the

surrounding cellular tissue; if they are, on the contrary, extended over considerable surface, they become partially detached, and hang down in shreds more or less putrefied, simulating the last stage of sphacelus.

Dr. David Wooster, of San Francisco, remarks on this (*Pacific Med. and Surg. Journ., May*, 1859), that "no vesicles have ever been observed in the forming concretion on this continent: that here at the incipient state the false membrane adheres most tenaciously, and is not easily detached; that the edges of it shade off so insensibly into the natural aspect of the neighborhood as to render a rigorous definition of its limits impossible; that the centre of the patch is whitish or grayish, and opaque, while its periphery becomes more and more translucent; further, that the affected parts never bleed, except when violence is used to tear or scrape off the false membrane, and then the bleeding stops with remarkable promptitude. and does not occur again, except on the repetition of the violence." Wooster states, also, that "our false membrane never becomes black; indeed, it is paler after than before death."

According to Dr. W. G. Dyas (*Chicag Med. Jour.*, Oct. 1859 to March, 1860), there are at least four distinct forms under which the disease may appear:

1. "It may destroy life in a few hours. by a violent and deep impression on the nervous centres, attended by congestion of the internal organs; in this form we may not be able to witness the pseudo membranous exudation, supposed to be pathognomonic of it. "There may be, corresponding to occasional violent cases of scarlet fever, "a deadly pallor of the surface, a dusky hue of the countenance, and particularly of the lips, a soft, irregular pulse, tongue moist and livid, pupils dilated, drowsiness, urine limpid, often suppressed; no complaint of local pain, and an air of indifference when roused from stupor. In such cases death will take place within four hours. This form of diphtheria is rare."

2. Another form, scarcely less malignant, is more frequently met with. "The subject of it, generally a child,

perhaps retires to rest apparently in good health. In the middle of the night, or rather towards morning, it awakes with a sense of distressing nausea, followed by vomiting of a thin, whitish, glairy fluid. Then there is a purging of something similar, but particularly offensive. The child most probably does not complain of uneasiness in the throat; he is drowsy, and seems disinclined to answer questions. The face is pallid and the expression altered. On examination, we are struck with a shining crimson appearance of the mucus membrane of the fauces. From the velum a tenacious, thin sheet of translucent mucus hangs like a curtain over the base of the tongue, the papillæ of which are tumified, its surface dry, clean and red. The pulse rapid, irregular and compressible. The skin may be warm, though more generally it will be found cool. After a lapse of some hours reaction takes place; and now there is a difficulty of deglutition. Drowsiness is succeeded by delirum; respiration is more frequent. The neck is swollen, hard and tender, chiefly in the parotid and submaxillary regions. The anterior half of the tongue may be clean, but posteriorly it is coated with a thick fur, which sometimes is continued to its tip. The whole of the fauces is covered with a deposit like wash-leather. One or both tonsils swelled; breath offensive; a thin sanies issuing from the nares. There may be epistaxis and bleeding from the gums. At first, the urine is limpid; but should the attack not terminate in death within twenty-four hours, it becomes more colored, and there will be a deposit of lithates; at a later stage it is albuminous, and contains the coloring matter of the blood; petechial spots form on the surface, diarrhœa sets in, or if it has been persistent from beginning, the discharges become altered in appearance being like what we occasionally see towards the close of dysenteric cases: serous, like the washings of flesh, and accompanied by intolerable fætor. The surface grows cold, and either coma, or a tetanic convulsion terminates life, generally within four days. Few cases of this kind

escape; and fortunately is not the usual type of diphtheria, even when malignant."

3. "The malignant form most familiar with practitioners commences with a sense of lassitude preceding a variable amount of fever and slight soreness of throat. The pulse becomes rapid, small and compressible; the tongue is covered with a thick, yellowish dirty-brown coat; the uvula, velum, and pharynx are at first of a dusky red; deglutition is painful and difficult; the neck, about the parotid and submaxillary regions, swells; from the nose distils an acrid humor; the voice changes; the breath grows fetid; the breathing, from mechanical obstruction, is stertorous; there is much thirst, and there may be vomiting. In some hours the erysipelatous hue of the fauces is replaced by a deposition, as if, as Dr. Blount expressed it, a thin layer of piepaste was spread over the parts, the edges being thick and abrupt. The urine is scanty and albuminous; debility increases, and the patient sinks exhausted, often retaining to the last the intellect in its integrity. This is the most frequent mode of accession, progress, and termination of malignant diphtheria, and its duration is generally from eight to ten weeks."

4. "The next variety of the disease is what has been termed croupal. In some epidemics this has been the prevailing type. It does not appear to be attended with the same oppression of the system of those already described. A sense of constriction in the larynx is an early symptom; the accompanying fever generally sthenic in character, though some such cases have not presented, from beginning to end, pyrexia. The false membrane rapidly extends to the respiratory organs; there is a hoarse, barking cough, with occasional paroxysms of suffocation, and death takes place by asphyxia."

5. "The form most frequently appearing in this country is of a more gradual invasion, and commences with symptoms of catarrh; coryza, slight fever, with headache, and a pain in one or both ears, usually usher in the attack. There is some soreness of the throat, without swelling either of the fauces or the glands externally. The appetite is often

scarcely lessened. There may be diminished energy, but not so much as to prevent the patient from attending to his usual pursuits. The fauces, on examination, will present one or more insulated patches of a grayish-white pseudo-membrane, not so defined at the edges, nor bordered with the same distinct redness as in the malignant variety but more shaded off. In this form, which lasts from five to ten days, there may be some albuminuria; and even after the more prominent sign of the disease shall have passed away, albuminuria may for a variable length of time be presistent, accompanied by an anæmic state of the system."

Dr. J. H. Hollister, Chicago, (*Chicago Med. Exam.*, March, 1860,) attributes the various modifications of the disease to the different physical conditions of those suffering from it. The sthenic form, for instance, presents inflammation of the most decided sthenic character, with remarkably plastic effusion, resulting in the formation of firm and thick false membrane. In one case, this pseudo-plasma was found to be so perfectly developed as to give, after expulsion, a perfect cast of the trachea and bronchial tubes to a great extent. An asthenic case, on the contrary, may be marked by nothing but a croupy cough, continuing, without any other disturbance, for a number of days. The fauces will be found affected by congestion of a passive character, the tonsils much enlarged, and the whole of the mucous membrane in the posterior part of the mouth of a dark, livid color. Slight secretion of mucus; labored respiration. Soon the affected parts change in appearance, become covered with an abundant sanious discharge, asphyxia developes itself, and the patient sinks in a few days.

Prof. Alonzo Clark, in his lecture on diphtherite, before the College of Physicians and Surgeons, of New York, (*Med. and Surg. Rep.*,) divided "all the modes of invasion peculiar to this affection" under two heads: those in which the *constitutional symptoms* are active from the beginning, and those in which the disease makes its appearance *very insidiously*, and only becomes manifest by the appearance of a

patch of exudation upon one or other of the tonsils, or in the fauces. "In this latter class of cases, the children do not complain of much ill health; yet it is apparent that they do not feel exactly well, and have, as a rule, not much disposition to play;" they may, however, be found in bed amusing themselves with their playthings. Voice full, perhaps a little hoarse; some coughing; slight glandular swelling on the outside of the throat. A little patch of membranous exudation on the fauces, sometimes surrounded by a venous injection. Pulse not very rapid, perhaps 100; countenance a little paler than usual; tongue not particularly covered with any coating, nor dry. In such cases a few cold chills may form the first indication of the disease; the constitutional form commences almost invariably with cold chills; there is high fever, and sometimes vomiting, on the very onset.

"The symptoms of membranous disease," says Dr. B. E. Cotting, of Roxbury, (*Bos. Med. and Surg. Journ.*, Sept. 22, 1859,) "are both constitutional and local. The constitutional may be so severe and so rapidly developed as to destroy life before the local have become a source of danger, or they may be so slight as to be overlooked. The local, also, may have the violence, though not the other characteristics of rapid inflammations, or their existence may even be a matter of doubt until made evident by obstruction, caused by the membrane fully formed. It is a self-limited disease, having its beginning, middle, and ending, as marked and uniform in progress, and as uncontrolled by any means now known, as variola. or any other disease that can be cited. The formation of the membrane (as constant a condition as the eruption in variola) does not always correspond in amount to the severity of the other symptoms, general or local, in this also resembling the diseases alluded to. The membrane may be only a thin film, or it may have the thickness and toughness of moistened parchment; it may cover only a very limited space, or it may occupy the whole mucous surface of the organs attacked. It usually forms grad-

ually, being at first a very thin layer (not unlike the first coat of white paint on a pine board;) then this layer becomes thicker and tougher, day by day, until it reaches its limit. Its progress, so far as it has any, is from above downward; and any deviation from this rule is rather apparent than real. From the outset, however, it generally covers all the surface that it will during the attack, increasing only in density. Its thinness may prevent its being early noticed on parts within sight, though clearly visible at a latter period of the disease. During its formative stage it remains firmly adherent to the mucous tissue beneath it, so that it is impossible to remove it, even by the most careful dissection. As soon as this stage is completed, usually in four or five days, the membrane begins to loosen from its foundation, and soon becomes entirely separated; it then creates sufficient irritation and cough to cause its expulsion. Sometimes it is cast off without observation, while at others, its ejection is attended with convulsive efforts of the greatest severity. If a portion is artificially removed, previous to its natural separation, another forms in its place."

The false membrane exists in all cases of diptheria, affirms Dr. Dyas (l. c.), except in those extremely rare ones wherein the system is at once overwhelmingly oppressed by the attack, and life is extinguished ere time is given for the usual characteristic phenomena to be fully developed. It appears very early, within eight-and-thirty hours from the beginning of the disease, generally on one tonsil, or rather in the sulcus between the anterior pillar and tonsil, like a stain left by nitrate of silver on a mucous surface—a pearl colored spot on a red ground. Sometimes it appears first on the uvula or velum. It extends more or less rapidly, so as often to cover the tonsils, uvula, velum, pharnyx, pillars of the fauces, and base of the tongue, with a continuous layer, in from twenty-four to forty-eight hours. It may pass along the respiratory passages to the bronchial tubes, and even down the œsophagus—according to some, as

far as the cardiac orifice; it has been found following the nasal ducts to the conjunctiva. The mucous membrane of the cheeks and gums, the cutaneous surface, the vulva and the anus may be its seat. Hence the terms faucial, pharyngeal, pharyngo-laryngeal or croupal, laryngo-tracheal, buccal, vulval, cutaneous, pharyngo-cutaneous, laryngo-cutaneous diphtheritis. Several of these forms have happened in the same family nearly at the same time, showing that the distinction is immaterial.

Generally, the thickness of the membrane increases with its area; this, however, varies from the thinnest imaginable pellicle to two or three lines. It may be firm, or a mere diffluent pulp. Sometimes it is in distinct, dull white patches; at others it is confluent. Occasionally it assumes a light buff, yellowish, ash-colored, or even black appearance.

Diptheritis may run its course from begginning to end, to recovery or to death, without a single pyrectic symptom; when fever accompanies it, the type of it is not always the same, although the tendency is usually to the typhoid. In this country the attendant fever has been frequently of an intermittent character, probably in consequence of prevailing malarious influence; if so, the intermittent ought to be considered as a complication, rather than a modification of the original disease.

Among other complications observed are measles, scarlet fever, small-pox, whooping cough, gastric fever, gastro-enteritis, meningitis, and the various diseases of the throat.

Dr. Daviot did not think pharyngeal laryngitis contagious; and Dr. Cotting also asserts to have seen no evidence that the disease in general is contagious. The evidence so far collected, however, leaves no room to doubt the truth of the remark made in the *London Lancet* (April, 1859), that "contagion plays the principal part in the propagation of diphtheria." Diphtheritic matter, ejected from the mouth of the patient and lodging in the nostrils of the attending physician, has subjected the latter to severe diph-

theritic inflammation, spreading to the pharynx, and inducing extreme prostration of the whole system. Quite a number of similar cases are on record. A boy using a bath in which a diphtheritic patient had been previously, contracted the cutaneous form of the disease. If the morbid matter happens to come in contact with an abraded or wounded part of the skin, the characteristic membrane will arise from that spot, inducing also the usual constitutional symptoms, and frequently the affection of the fauces.

There are still some other phases of this singular disease to be considered. Even if the patient has recovered from the immediate effects of the attack, and appears completely convalescent, he may, in several weeks, sink and die without any further well developed symptoms. Latent pneumonia is frequently discovered in the dead body. Amaurosis, strabismus, and presbyopia have been observed as consequences of diphtheritis; but one of its most common sequelæ is paralysis, either partial or general. Two, three weeks, or a month after all traces of the original complaint have disappeared, symptoms of anæmia manifest themselves, and slowly paralytic affactions are developed. The first is usually confined to the soft palate, or tongue, characterized by a difficulty of deglution, and a nasal speech; but this may be wanting. If present, it gives way to more general nervous accidents, sometimes increasing to delirium and convulsions (which must not be confounded with the same symptoms attending the more malignant forms of the disease). But these constitute rather an exception: in most of the cases tending to paralysis, a sense of numbness follows, in one or both arms, the neck or the lower extremities. There may also be vague pains in the back and elsewhere. Now the strength fails gradually; walking becomes more and more painful, until the upright position is impossible. The upper extremities partake in this weakness, the head sinks on the chest, etc. According to Trousseau, the same alternations may be present as in purely nervous affections: the numbness changing from one hand to the other, or the paralysis attacking

the legs alternately. In all cases there is an evident affection of the spinal system. Numbness of the cheeks and nose, or distortions of the face, defective articulation, strabismus, paralysis of the bladder and rectum sometimes supervene, There is no fever, a small pulse, but often a tumultuous action of the heart, with anæmic murmurs. The intellect remains intact, although the mental powers are depressed. Dr. Faure, of Paris, adds that during this paralytic affection sensation is diminished, and sometimes entirely lost, or replaced by formication. In some, sundry parts of the body become œdematous, in others gangrenous; others again are subjected to repeated faintings. If this condition terminates favorably, recovery is very slow, occupying from two to eight months.

Dr. Cooper, of the *San Francisco Med. Press*, (Jan. 1860,) saw many of his patients die suddenly from pyæmia, after recovering sufficiently from attacks of diphtheritis to walk about. In these cases the pulse never rose to the normal standard, and the skin remained colder than natural.

The diagnosis of diphtheritis must be based principally upon the patch-like aplastic exudation, accompanied by marked prostration, and spreading, particularly downwards. Some authors also mention a peculiar "muffled sound of respiration"; with Dr. Cotting this is the principal diagnostic sound. In his words; "It is very difficult to describe the sound. It can only be learnt by attentive and frequent observations; yet it is more reliable, and therefore more valuable, than all other diagnostic signs. Once in a while it can be detected before any other indication of the disease is manifested—say in the first two or three hours." The absence of the membrane within sight, is not always a sufficient evidence that the disease is not present. In such cases, the general condition of the patient, the frequent and feble pulse, and the *genius epidemicus* must be our guides. It is then that the sound so much relied on by Cotting may also prove a valuable symptom.

It cannot be difficult to distinguish diphtheritis and scar-

let fever, or putrid sore-throat, as there is no eruption, nor ulceration and sloughing in our disease; or at least the latter but rarely. More important is the diagnosis between diphtheritis and croup; Bretonneau, Duche, Guernsant, Baird, Barthez, Billet, Johnstone, and others defending their identity, and simply designating croup as laryngeal or tracheal diphtheritis, or declaring both to be the same disease, only affecting different portions of the same mucous membrane. But diphtheritis is essentially an asthenic disease, affecting the whole system, thus producing a series of constitutional symptoms; it is epidemic and contagious, while croup lacks all these attributes, being only an inflammatory local affection. In croup there is never the swelling of the lymphatics of the neck, which is a constant attendant upon diphtheritis, and the pseudo membrane itself sufficiently separates the two diseases: the origin from patches, the aplastic nature and its spreading far beyond the air passages, which become affected merely by confluence, are found only in diphtheritis. Croup is, further almost exclusively confined to children, whereas diphtheritis attacks indiscriminately children, adolescents, and adults. Croup is never followed by paralysis, and kills only in one way—by suffocation; diphtheritis may end in the same manner, but it also induces death by asthenia, and months after the disappearance of all exudation, by its effects on the nervous system.

In regard to the prognosis, Dr. D. Wooster thinks the mild variety, or simple-form of the disease (confined to the fauces,) is easily controlled; but the severe form (combined with constitutional symptoms and extensive exudation,) only with difficulty, giving an extremely unfavorable prognosis, even at the beginning. The gravity of the prognosis in general may be said to be in proportion to the suddenness of invasion, and the signs of congestion. Good symptoms are: the false membrane ceasing to extend, and detaching themselves in shreds; slight febrile symptoms;

absence of stupor; an unaffected pulse; a soft and moderately warm surface; expression not altered; unchanged color of face and lips; neck and papillæ of the tongue not swollen; no œdema of the fauces. In no disease, however, is amendment more fallacious: we cannot, either from a particular sign or assemblage of symptoms, calculate with some approximation at certainty what the termination may be. The disease may have commenced without any indication of particular danger, may develop itself in an apparently mild form; and there may even be a manifest improvement in every symptom, the little sufferer perhaps sitting up, smiling, eating, drinking, amusing himself; suddenly croupy symptoms supervene, or re-appear, to end only with life. The disease has extended from the pharynx to the respiratory passages, and death is the result of asphyxia. This may also be produced without affection of the larynx, either by the swollen condition of the fauces, tonsils, and cervical glands, in combination with obstruction of the nares and altered innervation, or by a congested state of the lungs frequently accompanying the malignant forms.

Nausea and vomiting, or convulsions in the beginning of the disease, a rapid extension of the exudation to the posterior nares, a sense of constriction in the larynx, disagreeable odor of the breath, a croupy sound of the respiration, great enlargement of the cervical glands, are among the symptoms of fatal significance.

Life may be destroyed even after the whole membrane has been thrown off. The excessive and unremitting exertions in breathing, caused by the obstruction offered to free respiration, as well as the intense constitutional disturbance, are apt to exhaust the vital power, without suffocation. Complications generally tend to produce an equally fatal result. The superseding paralysis is frequently but not always removed by proper treatment.

On the whole, the disease is, as Dr. Wooster says, one of the most decidedly fatal ones. The chance for a favorable re

covery among children is about one in three, according to Dr. Cotting; Dr. A. S. Clare thinks nine out of ten cases will recover, even with the malignant form, under an appropriate treatment. Admitting the influence of the curative means employed, there is still a formidable mortality unavoidably connected with the disase, though the number of deaths varies during different epidemics.

The post mortem examinations usually reveal a deep red or livid appearance of the mucous membrane of the palate, pharynx and adjacent parts, more or less extensive. In most cases the palate, tonsils, upper part of pharynx, epiglottis, bronchial tubes, sometimes the internal surface of the œsophagus, the pituitary membrane, or some of these parts, perhaps the trachea alone, are found invested with false membrane. Seldom gangrene or ulceration is manifest. The lungs may exhibit patches of hepatization or purulent infiltration; and there may be more or less congestion elsewhere. Occasionally blood is seen extravasated in the muscular tissue of the heart, and the kidneys often bear the marks of the disease. The viscera are often dotted over with petechial spots.

Dr. A. Jacobi, of New York, declares the diptheritic membrane homogeneous in structure to the pseudo-plasma of croup; but this seems to be a mistake. The great difference between them is, that the diphtheritic exudation appears to be incapable of organization, and never tends to organic union with the subjacent tissues. Dr. Cotting describes it as of a peculiar structure: "a tissue of elastic fibres longitudinally arranged, the fibres smooth, and in no way transversely striated. Great elasticity is one of its characteristics."

Dr. Laycock found a parasitic fungus (oidium albicans) in this membrane, and supposed, therefore, that the disease originated from the parasite; but its presence is thought to be merely accidental.

The nature of diphtheritis is not entirely clear. It is now pretty generally admitted to be a constitutional affec-

tion, of an asthenic character, with prominent and local manifestations, principally in the throat, resulting in the exudation of an inorganic pseudo membrane. The disease is the result of a distinct influence (diphtheritic miasm,) contaminating the blood, or infecting the whole system with morbid poison. The conjecture of Dr. Days, who considers a morbid impression on the par vagum as one of the principal features of diphtheritis, needs confirmation.

In accordance with this view, the therapeutical indications are the elimination or neutralization of the offensive matter, whatever it may be, the correction and mitigation of the local symptoms, and the support of the system, where necessary. Consequently, a general or constitutional and local treatment is required, with strict dietetic measures.

Daviot, Meigs and others have practised general and local bleeding, not without success; the general character of the disease, during the last three years, and especially on this continent, has been such as to forbid blood-letting in any form, and is at present looked upon as inadmissible. The croupal form predominating at the time of Bretonneau, seemed to offer an indication not now appearing. The same may be said of mercury, in spite of the many advocates calomel has found up to this day. Whenever the complaint extended to the larynx and trachea, Bretonneau placed his chief reliance on calomel, in three grain doses every hour, repeated every three hours. The most extensive use is made of it by Dr. I. Meranda, of New Carlisle, Ohio, (*Cin. Lancet and Obs.* March, 1860.) To the strong, the robust, the plethoric patient, and in cases distinguished by high arterial excitement, he prescribes it with jalap in full purgative doses, following with the usual remedies against high febrile action. To those of a feeble constitution, or where marks of prostration are apparent, he gives calomel in alterative doses, conjoined with opium and ipecacuanha, or with camphorated Dover's powder, until there is an evacuation of green stools. When croupal symptoms supervene, calomel in small but often repeated doses is Dr. Me-

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Warren Stone, of Louisiana, (*New Orleans Med. and Surg. Jour.*, Jan. 1860,) mentions the citrate of magnesia, six or eight drachms, to be given every two hours until it operates. Equal, if not better, is the advice of Drs. D. Wooster, of California, (*Pacific Med. and Surg. Journ.*, 1859,) and Wm. L. Wells, of Wisconsin, (*Chic. Med. Exam.* April, 1860:) to select either the mildest laxatives, or employ injections, so as to move the bowels once a day.

"I protest," writes Dr. Bigelow, "in the most serious manner, against the use of emetics in angine couenneuse," and they are certainly never plainly indicated. Nevertheless, they have been pronounced by some occasionally serviceable at the period of invasion of the disease, especially in young children, and when the false membrane extends to the trachea; others, on a more rational basis, will not admit them, except when their mechanical action might assist in detaching the membrane. In either case, neither antimony nor ipecacuanha should be nsed, on account of their depressing effects. (Wooster's plan, to commence with ipecacuanha in full doses and repeat them for two or three days, seems not to have been followed anywhere.) Drs. Meigs and Pollard used alumn as an emetic, a teaspoonfull mixed with molasses, repeating that dose in the course of ten or twenty minutes, if required. But the turpeth mineral (subsulphate of mercury,) first recommended by Dr. Hubbard of Maine, is now acknowledged as the best emetic in diphtheritis. It never induces catharsis, and is not followed by prostration, while it operates promptly and certainly. Two or three grains may be given to a child of two years every ten or fifteen minutes, until vomiting takes place. Both alum and turpeth mineral are well suited to patients above one year; for smaller children perhaps some preparation of squill would be preferable (Dr. Dyas.)

The most prominent amongst the remedies employed as directly counteracting the morbid influence is the chlorate of potash, or combined with hydrochloric acid, iron and ether. Dr. Bigelow administers every three hours ten

grains of the chlorate and ten grains of the bichlorate, in some convenient vehicle, giving at the same time one-tenth of a grain of calonel with sugar, to be put dry on the tongue, once in one or two hours or less frequent, sometimes omitting the calomel altogether for awhile, according to circumstances. Chlorate of potash witn hydrochloric acid has been recommended by Dr. Kingsford (*Lancet*, Jan. 1859); Dr. I. Meranda proscribes two drachms of the chlorate with one fluid drachm of hydrochloric acid in eight fluid ounces of water, half an ounce to be taken every three hours. This formula was originally given by Dr. Lamden (*Lancet*, Nov. 1858), it contains free chlorine in solution. The chlorate and quinine in full doses constitute the treatment of Dr. Barker, of New York. Dr. Jacobi gives from a half to one drachm per day to a child from six months to four years old, three drachms to those above that age, continuing for weeks and even months. He usually adds iron, the muriatic tincture in preference. Finding in severe cases the chlorate to operate too severely alone, he also combines it or precedes it with a few large doses of quinine. The best form, in his judgment, is the solution in water with the addition of some acid, generally the muriatic. Dr. A. S. Clark approves of the free use of the chlorate of potash and sesquichloride of iron in tincture, diluted with nitrous ether, but he prefers the following formula: chlorate of potash, one ounce; syrup of lemons, water, of each four ounces; sulphate of morphine, two grains. Take a tablespoonfull every four or five hours.

In Wisconsin, the tincture of the sesquichloride of iron, the hydrochloric acid and the chlorate of potash were given together in a covenient vehicle, or alternately full doses. Sometimes the tincture of iron cannot be borne for many days; then the sulphate of quinine with citrate iron ought to be substiiuted (Dr. Wm. I. Wells). The "Lancet Commission," placed the most reliance in a mixture of sesquichloride of iron with chlorate of potash, chloric ether and hydrochloric acid, sweetened with syrup. The chlorate may also be given after the method of Dr. Gardner, of

New York, in a syrup saturated with it, a teaspoonful in four hours, alternately with three drops of perchloride of iron in syrup. Nothing else is required in cases without local affection.

But notwithstanding this general adoption of the chlorate of potash, some doubts in regard to its efficacy have been expressed, especially by American practitioners. Prof. Alonzo Clark says it is not, as claimed, a specific in this disease, but still of some benefit, and should therefore form a part of the treatment. In the able article of Dr. Dyas, occurs the following passage: "It is very much a matter of conjecture how chlorate of potash acts on the human organism, and on the whole it is doubtful if it possesses a great deal of therapeutic value in diphtheria. It may be prescribed in combination with some bitter infusion (cascarilla, gentian, or bark,) in doses of from ten to thirty grains, according to age." Most summarily Dr. Wooster disposes of it: he believes the chlorate of potash harmless, but of unproved efficacy, simply mitigating the fœtor of expiration.

The declining reputation of this remedy is apparently to be transferred to the muriate and sesquichloride of iron, heretofore only employed as adjuvants and tonics. In the latter quality, Dyas speaks of Thompson's bitter wine of iron, containing one grain of Wetherell's precipitated extract of bark and two grains of citrate of iron in a teaspoonful of cherry wine; but some prefer the tincture of the sesquichloride of iron, "ten or fifteen drops every third or fourth hour." Dr. F. Isnard warmly recommends (*Gaz. des Hop.: Amer. Med. Monthly*, March, 1860,) the perchloride of iron as specific against croup and diphtheritis. It should be administered as soon as possible, in large doses, and continued at all stages of the disease. Dr. Th. Heckstall Smith, (*Braithwaite's Retrospect*, Jan. 1860,) while relying chiefly on gallic acid, found the sesquichloride of iron tincture far superior to anything; and Dr. W. H. Ranking (*Ranking's Abstract*, No. 29,) confirms the value of this tinc-

ture as an internal remedy in diphtheritis. If so, the treatment of this disease would be materially simplified; in most of the present methods too many remedies are administered promiscuously.

In a monograph on scarlatina and diphtheria, (London, 1859,) which he considers as one and the same thing, Dr. George Hull praises the sesqui-carbonate of ammonia as a specific, in doses from two to ten grains, every two, three or four hours. Baron treated before him (*Gaz. de Paris*, 5 1856,) diphtheritis with Vichy water and bicarbonate of soda.

A composition called "ferruginated cod-liver oil," has been proposed by Dr. D. Wooster, two fluid drachms with one of brandy, to be taken four or five times a day, or oftener, if the stomach will bear it.

To meet the second indication, a large number of topical applications have been employed, without due consideration of the question, how far, if ever, it was practicable or necessary to remove the false membrane. Dr. Bigelow always removes, with a long forceps, or by scraping, or by any other means, violent or gentle all accessible portions of it. Dr. Cotting, on the other hand, found that harsh attempts by emetics, probangs and the like, to dislodge the membrane before its natural separation, are often accompanied by fearful risks; and could it be affected, it would involve a re-formation, more to be dreaded in the exhausted state of the patient than its first appearing. Dr. Wells also removes the membrane with the forceps, where it can be done, which is rarely the case.

Nitrate of silver in the solid stick, when practicable, or more commonly in strong solution, has been applied most extensively to the throat. Many are of the opinion that it could not be superseded by any other local application; such an assertion, however, will not hold good everywhere. The application in substance is stated to have had occasionally the most serious consequences. Twenty, thirty, forty, sixty grains to an ounce of water have been employed, in the be-

ginning as well as in the more advanced stages of the disease. Prof. Alonzo Clark and Dr. Jacobi, considering the application of the caustic to the membrane itself of no special service, only apply it to the parts immediately around the exudation, so as to prevent the inflammation from spreading, and limit thus the further extension of tne membrane.

Bretonneau principally depended on the energetic application of concentrated muriatic acid. It has been employed by others, diluted or not, in very young children mixed with an equal quantity of honey. Equal parts of hydrochloric acid and tinc. of myrrh, says Dr. Beardsley, detached the pseudo-membrane most readily, and diminished the liability of its being renewed.

A strong solution of sulphate of copper (one drachm to one ounce of water) may also be applied topically. Used in the same manner, some preparations of iron have been found equally useful. The concentrated solution of the perchloride, or Monsell's salt in powder, or the tincture of the sesquichloride, are declared by Wooster, Wells, Beardsley, Byas, A. S. Clark and others, to be the most efficacious and valuable of all topical applications.

Dr. J. J. Morgan expresses a great predilection for a saturated solution of acetate of lead (adding one grain of morphine to the ounce,) as a gargle and to be applied with a sponge, two or three times in twenty-four hours. At least he commences with it in every instance, and if the disease advances in spite of it, he substitutes the lunar caustic in solution.

Tannin has not been tried sufficiently. Dr. Heighway, of Cincinnati, dissolved two drachms of it in one pint of glycerine, and applied that solution by means of a probang, with good effect. Tannin may also be used alone.

Particularly destructive to the exudation is sulphurous acid (Dr. Heighway, Prof, Comegys); it is best used in the form of a salt, as the hyposulphide of soda.

Dulmont found (*Gaz. des Hop.*, 47, 1856,) nitrate of silver and muriatic acid sufficient, but lemon-juice, painted

over, a good application; Homotte added a little alum. Tincture of iodine has been tried about the same time, without giving satisfaction. Upon experiments made by him, Ozanam based in the same year, the conclusion that all pseudo-membranous productions are best destroyed by the alkalies and muriatic acid, and soonest removed by bromine and bromide of potash. Thereupon he recommended this bromide or bromine-water against diphtheritis, croup and similar affections; but this proposition seems to have met with no favor.

An idea of Dr. A. S. Clark deserves a trial: he thinks glycerine may be employed, in advanced states, between the caustic applications, for its lubricating as well as for its solvent powers.

Strong nitric acid, applied by means of a brush, is the remedy of Prof. Comegys, when there are deep and extensive ulcerations.

Baudelocque used a decoction of bark with chloride of soda as a gargle; Wooster also mentions the solution of chloride of sodium, and Dr. Wells asserts that gargles with chloride of soda and chlorate of potash act undoubtedly as a solvent of the membrane. Dr. Roche (*Union Medicale*, No. 88; *N. A. Medico-Chir. Rev.*, Nov. 1859,) was very successful with injections containing chloride of sodium. He practices an almost continuous irrigation of the throat, by means of Equisier's irrigator, considering the irrigation the principal curative agent, and therefore employing indifferently solutions containing salt, alum, or the chlorates.

In mild cases alum gargles as the only local application have proved sufficient. Gargles with alum and red-oak bark are proposed for severe cases; but tanin and alum seem to be useless, at least in Dr. Well's experience. Baudelocque applied powdered alum to the nostrils by means of a souffloir; Daviot thought it useful only in the early stage of the affection.

A method mentioned by Dr. Perron (*L' Union*, 53, 1856,) has been revived and modified by Dr. Bigelow. Perron

blew alum and sulphate of zinc into the mouth several times a day, using afterwards gargles with alum. Bigelow commences his treatment with an insufflation of one drachm of powdered burnt alum, and repeats that operation as long as a tendency to the formation of the false membrane continues, alternating in the later time with tannin.

When, after a few days, the fauces become so exceedingly sensitive as to give great pain, Dr. G. W. Claiborne (*Virginia Med. Journal.*, Oct. 1859,) used with good success a wash of borax, honey and myrrh.

Dr. I. S. Briston prefers locally in all cases the employment of mild detergent gargles (*Braithwaite's Retrospect*, Jan. 1860.)

A gentle stimulant, in the form of a mild lotion, say eight grains of iodide of zinc to an ounce of water, is, in the opinion of Dr. W. Judkins, of Cincinati, all the topical treatment required.

Dr. S. Cartwright employs a local application of his own invention, and expresses himself well satisfied with it, (*N. O. Med. and Surg. Journ.*, Nov. 1859). He infuses for several days in one pint of diluted alcohol, finely powdered hydrastis root and the powdered bark of the root of the myrica cerifera, of each one ounce; three ounces of gum myrrh, and two drachms of capsicum. "A piece of wool or cotton (this is better), fastened to a probang, saturated in the above tincture, is the best thing I have ever found to swab the throat with."

Where the running from the nose is very excessive and offensive, a solution of chlorate of potash, or better of chlorate of soda (Dr. Jacobi), or Labarraque's solution (Dr. Thomas, of New York), may be injected through the nostrils.

Fumigating the throat with boiling water and vinegar poured on catnip, and Labarraque's solution of chloride of soda added, is a method practised by Dr. G. Buck, of New York. In two cases treated by Dr. Bibbins, of the same location, inhaling the vapor of warm water seemed to benefit

the patient most. Prof. Comegys testifies to the beneficial effect of inhalations of one ounce of sulphuric ether with two drachms of tannic acid, a cloth being wetted with the solution and placed in the mouth.

The opinions of the profession divided in nearly everything connected with diphtheritis, are most decidedly opposed to each other in reference to external applications. Daviot, for instance, admits rubefacients; Wooster exhorts us never to use liniments or mustard, because they increase the anguish of the patient and do not mitigate the affection. Baudelocque applied blisters to the thigh; Daviot objects to blisters in general as having the serious inconvenience of adding cutaneous to pharyngeal diphtheritis, and Meranda, who has but little confidence in external applications to the throat, informs us that blisters are especially hurtful. Dr. Beardsley experienced no satisfactory results from external revulsives, and Dr. White of Cincinati, declares all external applications in the form of liniments, tincture of iodine, poultices, etc., of no benefit. According to Wooster's directions, in the first stage, while the engorgement is red and hot, cold wet compresses should be applied to the neck; further along, when the engorgement of the throat becomes œdematous, warm fomentations. Dr. G. Hull orders the outside of the neck and throat to be well rubbed with a strong embrocation of ammonia, camphor and opium. A more extensive course is followed by Dr. A. S. Clark, who carries the thing almost too far: he advocates sinapisms to the legs, feet, hands and arms, external stimulants to the neck, and as the disease advances, fomentations of hops, poultices, etc.

Instead of all these annoying and troublesome appliances, Dr. S. M. Bigelew puts his patients from the beginning into a tepid bath of one or two hours' duration, and has that repeated every two or three days.

There is another feature in the rational treatment of diphtheritis which claims particular attention. The system is to be supported by a free, energetic and persistent tonic

or sustaining constitutional treatment, besides the exhibition of general and local remedies as already specified. All authors agree that a vigorous course, with tonics and stimulants, is an imperative requirement. Therefore the most generous diet: strong beef-tea, mutton-broth, chicken soup, eggs, wine, brandy, and "whatever other form of nutriment the ingenuity of the surgeon, or fancy of the patient may suggest" (Lancet Commission). "We urged," relates Dr. Wells, "and in some cases forced patients to take nourishment, notwithstanding the loss of appetite, amounting in some instances to a disgust for food." Where a sufficient amount of nourishment cannot be swallowed, it must be supplied by injections.

Among the remedies proper, turpentine, camphor, carbonate of ammonia, Peruvian bark, but especially the tinctures of iron and quinine, in doses adapted to the age and condition of the patient, are usually selected, Quinine, with a mineral acid and a little lemon syrup, (Dr. Claiborne,) is a very desirable preparation. Sometimes, however, there seems to be some contraindication to the exhition of quinine. "When the tongue is foul and the stomach irritable, it is better to withhold or suspend it. Loss of appetite, soft compressible pulse, tremulous tongue, languor and subdued expression are indications for its exhibition," (Dr. Dyas.) A most comprehensive and impressive description of this part of the treatment is furnished by Dr. Bigelow. He says:

"I commence immediately with the use of tonics, stimulants, and the most nourishing possible fluid animal food. Quinine every three hours in as large doses as can be borne; bitters composed of cinchona, columbo, chamomile, quassia, bitter orange peel, etc., formed into a strong infusion, to which I add brandy and a little syrup:

℞—Cortex cinchonæ flavæ cont.,
Radix gentianæ cont., *aa* ʒ ij.
Radix Columbæ cont., ʒ ss.
Cortex aurantii,
Flores anthemidis,
Quassia amara, *aa* ʒ ij.
Aqua bulliens, O. ij. M., fiat infusum;
Adde: Spiritus vini Gallici, ʒ vj.
Syrupus aurantii corticis, ʒ iv.

"D. S. To an adult, one-half to two-thirds of an ounce five or six times in twenty-four hours.

"Strong bouillon of beef, mutton and chicken cooked together, with tapioca or vermicelli as a change, a teacupful every three or four hours, occasionally with a boiled egg. Ale, porter, sherry, brandy and water in such quantities as may be borne. During recovery I add to our already nourishing fluid diet, solids, such as beef-steaks, roast-beef, mutton-chops, poultry, game, vegetables, etc. Throughout the whole course of the disease I give an abundance of such fruits as peaches, grapes, apricots, cherries, currents, raspberries, strawberries. Lemonade and morsels of ice as beverage, or soda-water and syrup of raspberries, currants, and gooseberries."

A constant supply of fresh air must not be overlooked, nor that all-important care, with the whole train of minor services, usually included in the phrase "*good nursing.*"

A few peculiar methods of treatment remain to be noticed.

During the epidemic in Augusta, in 1858, Dr. Campbell, observing that the accompanying fever was paroxysmal in character, adopted an anti-periodic medication, which proved more successful than the method previously employed.

Dr. C. Swaby Smith, of Burbage, (*Braithw. Retros.*, Jan. 1860,) commences with the application of a strong solution of chlorinated soda to the fauces, and a sinapism to the throat. A gargle, containing two ounces of a solution of chlorinated soda, two drachms of the tinct. of myrrh, and six ounces of water, is to be used every half hour. Where

the children are too young to gargle, the throat may be frequently washed with the same mixture by means of a piece of a sponge. Internally: chlorate of potash, two drachms; dilute nitric acid two drachms; Battery's solution of cinchona, one drachm; water, six ounces. About the sixth part (varying according to the patient's age,) to be taken every two hours. If there is much pain in the limbs, a few minims of the tincture of colchicum are added, which addition has proved highly advantageous. The diet to consist of strong beef-tea, port-wine, and all the nourishment the patient can take.

Dr. G. Bottomley, of Croydon, describes (*Braithw. Retrospect,* Jan.,) his plan for children as follows:

℞—Solutionis chlorini,
Syrupi simplicis, *aa* ʒ ss.
Aquæ distillatæ, q. s. ad ʒ vj.
M., fiat gargarisma sæpe utendum.

℞—Solutionis chlorini, gtt. iv.
Syrupi aurantis, ʒ j.
Aquæ distillatæ, q. s. ad ʒ ss.
M., fiat haustus, secunda quaque hora sumendus.

The dose is increased according to age. Calomel in one grain doses and more. Diet: concentrated jellies, strong beef-tea, wine, etc.

Dr. J. C. S. Jennings, of Malinesburg, (*Braithw.*, Jan.,) has adopted rather a rough treatment, and institutes it invariably in all cases, regardless of sex, age or incubation of disease. First, an active emetic of antimonial wine, from half an ounce to an ounce, according to age: then free cauterization of the throat with solid nitrate of silver; mustard-poultice from ear to ear; the feet and legs plunged into a hot bath, and the patient confined to bed. After the operation of the emetic, a cathartic of calomel and compound extract of colocynth; four hours afterwards this mixture:

℞—Quiniæ disulph., ʒ ss.
Potassæ chloratis, ʒ j.
Acidi hydrochlorici diluti, ʒ ss.
Aquæ, ʒ viij.

M., fiat mistura, cujus sumatur pars, sexta quarta quaque hora

At the same time a gargle of chlorine solution is directed to be prepared frequently, by saturating water with the proto-oxide of chlorine, generated from two parts of chlorate of potass., one of hydrochloric acid, and one of water. The fauces are to be sponged out with this quite frequently.

Greatly at variance with all others is the method detailed by Dr. B. E. Cotting (*Boston Med. and Surg. Journ.*). While disapproving bleeding, leeches, cupping, blisters, sinapisms, mercurial and drastic purgatives, emetics, cauterizations, he restricts the therapeutical applications to almost nothing. "Mild and nutritious diet, including, if possible, such articles as the patient willingly accepts, is to be preferred to abstinence, certainly to a stimulating course. The inhalation of watery vapor, by an inhaler or other practicable expedient, is often, not always, very agreeable; and if it is not very effective, it is at least without objection. A warm fomentation, or, better still, a warm emollient poultice, covering the whole anterior half of the neck, is probably of service. But above all, anodynes, sufficient to subdue restlessness and ensure quietude, are most important agents. The particular form is of little consequence. Dover's powder, or an equivolent containing the strength of a grain of opium and a grain of ipecac. to the ounce, is a very convenient form. The ipecac., however, is not important. Mucilaginous drinks are generally acceptable." From his own statements, it appears that Dr. Cotting was not very happy with this lenient treatment, as old as the history of medicine thought it to be.

Stranger still, but far more successful, appears a plan which Prof. E. S. Cooper adopted (*Boston Med. and Surg. Journ.*, Jan. 5, 1860; *Pacific Med. Journ.*, Jan.), after des-

pairing almost of achieving anything against the fatal disease. With his treatment he lost only one patient out of thirty-one; and this entitles his proposition to a consideration it could hardly otherwise claim, with all its originality. No applications to the throat are used by him. An embrocation of chloroform (three ounces), cod-liver oil (twelve ounces), and spirit of turpentine (two ounces), is applied freely all over the neck, breast and abdomen, upon flannels covered with oil-silk. For internal use he gives this mixture: Ext. glycyrrh., three ounces, acaciæ gum, one ounce; antim. tart., one grain; sacch. alb., two ounces; aquæ, eighteen ounces. Give a wineglassful every two hours to a young child, say two years old, and increase in proportion to age. During this treatment, not a particle of any thing else is allowed,—not a drop of water, nor the least nourishment, save what is in the medicine.

Whatever method may be followed, it seems to be essential to continue both general and local treatment for some days after the disappearance of all morbid symptoms.

Experiments with tracheotomy in diphtheritis have not been wanting. On this continent it has been strongly objected *to*, and is stated to have never been successful. With Bretonneau it was the last resource; he operated three times, saving one patient. In France the operation has been defended and performed up to the present time. Dr. Bigelow follows Trousseau in recommending it, adding that it must be done earlier than in croup, before the vital powers are too low. A method peculiar to Dr. Bigelow is the insufflation of alum into the pharynx, and as far as manageable into the larynx, through the tracheal tubes, immediately after the operation and according to circumstances.

In conclusion, the sequelæ of diphtheritis ought to come in for their share of the treatment; but the reports are in this regard almost too meagre. Dr. Bigelow merely alludes to iron tonics, a generous diet, cold affusions, warm clothing, and exercise in open air, for the cure of the subsequent paralysis. In slight cases sulphate of zinc and

quinia have proved sufficient. According to Dyas, the blood must be supplied with its normal proportion of hæmatosin; and this is to be effected through the agency of preparations of iron, with a generous and supporting diet. Sulphur baths, electricity, preparations of zinc and valerian, are occasionally valuable auxiliaries. The same treatment will be required for strabismus, presbyopia, and other ailments somtimes following diphtheritis. Dr. Meranda's cure of the first named, by spigelia and calomel (given in consequence of an imagined connexion with worms,) was evidently an accidental occurrence. Jackson's compound syrup of phosphates has been recommended, and Churchill's preparations of the hypophosphites may be still better; but the remedy principally to be relied on, as well as for the general and local treatment of diphtheritis itself, as for all affections following it, is undoubtedly iron.—*Cin. Lancet and Observer.*

TPE TENDENCIES OF THE PRESENT DAY IN REGARD TO THE DOCTRINE OF DEBILITY AND THE TREATMENT OF DISEASE BY STIMULANTS.

(From the Philadelphia Medical and Surgical Reporter.)

Dr. Samuel D. Gross introduced the subject for discussion by remarking upon the numerous revolutions in medicine. Change is written everywhere. Each age has its absurdities and inconsistencies. This is natural so long as each one acts as a free agent. Were there no changes there would be no sound progress, and the science would become stagnant.

It requires no prophetic eye to see that we are on the verge of a most fearfnl revolution in medicine: hence it is proper to pause and inquire, "Watchman, what of the nighţ?"

The tendency of the medical profession at present is to

the abandonment of all active depletory measures and to the employment of stimulants, on the ground that a change has occurred in the type of diseases, and that man is no longer able to bear the former active treatment. Many practitioners even coincide with the late Dr. Todd, of London, in the belief that leeches can never be used with safety.

The inquiries of the present paper will be two: first, has there really been any change in the type of diseases? and secondly, are the people of the present day less capable of resisting active depletion? The endeavor will be to show that both of these views are untenable; that they originate in misconception and superficial observation. The stimulant treatment is not new. We find in the last century, all over Europe, the Brunonian system exercising a powerful sway over the minds of many otherwise enlightened practitioners—some even supposing that in it they had discovered the philosophers stone in the treatment of disease. John Brown, the author of this theory, pretended to have made a stupendous discovery, founded upon his own personal experience. The speaker then gave a brief biography of this remarkable personage, and the progress of his doctrines through England and the Continent, especially in Italy and Germany.

After this brief digression, the lecturer came to the consideration of the two questions proposed.

Is there really a change in the tpye of diseases? and is it true that mankind are unable now to bear depletion when laboring under inflammation as well as in other times? To the first he would reply in the negative. In a practice of upwards of thirty years, he had seen no reason to justify such an opinion. Diseases seem the same now as when he entered upon the practice of medicine. Even in epidemics no change of type seems to have occurred; but in ordinary inflammatory diseases the only changes to which they are liable are dependent upon individual peculiarities, etc. In point of facts, the morbid action is essentially the same, va-

rying in degree but not in character. The same causes which were in operation thirty years ago act now.

Entertaining these convictions, he need scarcely say that the treatment so much insisted on by Bennet, Todd, and others, of all inflammatory affections by stimulants has not only no foundation in truth, but is at direct variance with the best interests of the sick and the reputation of the physician. It is difficult to conceive how any enlightened physician can bring himself to entertain such a belief.

The only safe way to treat disease is to look at every case as making its own laws, which have reference to the exciting cause, the structure involved, the duration of the attack and the prior state of the system. If the stimulant school see nothing but reduced action or depressed vital power, it proves pretty conclusively one of three things: that they are incapable of making accurate observation, that they are blinded by prejudice, or that they have to deal with a class of patients whose habits and conditions are such as to forbid the employment of any other method of cure. The first two we cannot believe, and we therefore come to the conclusion that these gentlemen deal only with depraved, worn-out constitutions. But here we are at fault; such an idea would be absurd—they must certainly encounter occasionally a stout, robust patient. Nor can it be the stage of the disease at the time of their arrival on the scene. Fashion, all are aware, has its influence in medicine as well as dress. John Brown, a dissolute doctor, became the leader of a new sect in medicine which retained its supremacy for nearly a quarter of a century—its sole basis being the relief which he experienced from alcoholic potations and laudnam when suffering with the gout. Unity of disease and the lancet were the great weapons of Rush. Purgatives ruled at the time of Hamilton. Dyspepsia, disease of the liver, etc., each had their turn as the fashionable disease. At present, every thing is a change of type in disease, and stimuli are the remedies; bleed the patient and he dies; purge him actively, and if he recovers it will be very slowly. Just

now the peculiar pathology of Virchow is coming into notice, and seems destined to enslave to a great extent the medical mind. Although most medical men, as well as the community at large, at present regard blood-letting with terror, yet it has been beneficially employed millions of times. No doubt it has been abused. We can hardly reconcile with our notions of propriety the loss of *two*, much less of *three hundred* ounces of blood in the course of a few days for the cure of an idiopathic or traumatic inflammation, and yet such cases are easily found of a well authenticated character in the annals of surgery.

Dr. Francis, of New York, distinguished alike as a skilful practitioner and an accomplished scholar, is a living monument of this heroic treatment. In a violent attack of croup, he lost in a few days, nearly three hundred ounces of blood. Physick, in an attack of yellow fever, in 1787, was bled to the amount of one hundred and seventy-six ounces. No one at the present day would dare to follow such an example. It is no longer the fashion; the lancet grows rusty in its case, and the cutler has almost ceased to manufacture it. Even the occupation of the leecher is almost gone. When a student in this city, thirty-two years ago, it was common, in an attack of acute pleuritis, to bleed the patient three or four times, and sometimes even that often a day—the same orifice being repeatedly opened for that purpose.

If we inquire into the causes of these revolutions, we shall find them not in a change of type, or in the powers of the system, to withstand the effects of inflammation, but in a greatly enlarged knowledge of remedies and of their application to the cure of diseases. The use of quinia and morphia is now much better understood than formerly, and the antiphlogistic virtues of aconite and veratrum viride were entirely unknown until a very recent period. Quinia has become the great remedy in malarial affections; opium is a powerful adjuvant in allaying pain and procuring rest both to the part and the system, and aconite and veratrum

viride exercise so astonishing an influence in controlling arterial action as to render them special favorites with every enlightened practitioner. They have, in fact, taken the place of the lancet, tartar emetic, etc.

Thus we readily see why blood-letting has fallen into desuetude, unmerited certainly; for, spite of all, an early spoliative venesection and the judicious use of the more heroic articles of the materia medica would often do more in saving structure and functions than any of the present popular remedies.

Practitioners are too prone to go to extremes and be led away by specious theories. Losing sight of common sense, and forgetting the teachings of experience, they readily grasp the shadow and forsake the substance. Hence, the discordant views which so constantly agitate our profession, perplexing the public mind, and impairing our influence. Hence the strong-hold which all forms of quackery have taken upon the people.

The past is pregnant with useful lessons. It teaches, on the one hand, the futility of all exclusive systems of medicine, and, on the other, the importance of being governed in our views of pathology and practice by common sense, aided by a chastened experience, which holds fast to the good and useful, and discards that which is hurtful. Its motto is enlightened, unprejudiced conservatism, ever ready to enlarge its boundaries by cautious observation and induction, and resolved to avoid exclusivism in every form. Standing upon this elevated and philosophical platform, rational medicine avails itself of all that is useful in mitigating or curing disease, not disdainieg the lancet, &c., on the one hand, or, on the other, a resource to stimulants.

In conclusion, while proclaiming himself an advocate of an enlightened eclecticism based upon experience, reasoning, and philosophy, he stated emphatically that he was not an advocate of large doses, or of the indiscriminate use of any medicine whatever. A judicious combination of a few well-selected articles, or occasionally the exhibition even of a single substance, united with absolute rest and a proper regu-

lation of the diet, will generally accomplish the object much better, immediately and prospectively than the polypharmacy and heroic treatment so much in vogue in certain quarters only a few years ago. As the practitioner grows older, he almost uniformly gives less medicine, satisfied that he is generally only the assistant of nature, and not her master.

(*To be Continued.*)

DIGITALIS IN THE TREATMENT OF MANIA A POTU.

BY G. C. CATLETT, M. D.

The experience of the Physicians of this City so far as my knowledge extends in the treatment of Mania a Potu, has been very unsatisfactory. Most of the attacks assuming a remarkably acute form; with great violence of delirium, furious mania, and persistent mental aberrations, have generally resisted the opium and stimulating as well as all of the former established methods of treatment for this unfortunate class of sufferers.

So great has been the mortality from this disease during the last four or five years, notwithstanding we have attempted to discriminate between the chronic and the acute forms; that we have become apprehensive that we have not been treating alcoholic poison. Indeed so general has become the impression that the various alcoholic drinks generally used, contain a foreign poison, that those who are in the habit of becoming intoxicated are significantly said to have taken passage on the strychnine line for an unknown destination. While the symptoms of the numerous cases that have come under my observation do not in the slightest resemble those from the poison of Strychnia, yet, the great apparent differences in the character of the symptoms as well as in the result of the disease—produced by excessive use of alcohol—at the present and former periods, that it would very naturally

create apprehension and strike terror to the spiritually infatuated.

There have been a few persons, by a prolonged debauch have induced inflammation of the mucous membrane of the stomach or at least, such a degree of irritability that a continuation of indulgence was impossible, as nothing introduced into it would be retained, soon therefore from the withdrawal of the stimulus, delirium tremens would supervene, characterized by intense hallucinations, great tremulousness, incapacity to sleep, irritability of stomach, tender epigastrium, and deficiency of the secretions. · Counter irritations to the epigastrium, a mercurial cathartic, stimulants judiciously administered (I prefer Tinct. Serpentaria; and Tinct. Valerian, equal proportions.) and Morphia *pro re nata*, will generally in my hands relieve such cases. But that form of this disease that is produced by the constant daily use of alcohol long continued, poisoning the blood and resulting in acute mania, is the fatal form, or properly Mania a Potu. In relation to this form of the disease Prof. Stone of New Orleans says:

Brain fever and appoplexy are terms often kindly substituted as being more respectable: but names do not alter facts. Mania a potu usually occurs with the robust who habitually use alcoholic stimulants, but not to any great excess, except upon occasions, and when they are carried to a certain extent, a necessity for their continuance is created, and their excessive use cannot, or will not, be resisted until the stomach gives way and finally rejects them. During this process the mucous membrane becomes engorged, the digestion, and finally the appetite, entirely fail, and the patient is sustained for some days after by stimulants alone, until furious delirium sets in.

The madness is not due to the stoppage of an accustomed stimulant, for it often sets in while in the full use of it, but it is plainly due to alcoholic poison and the absence of proper nutritive matter in the blood. I think I may add another cause which has often something to do in causing the de-

lirium, and certainly much to do in causing death, under some modes of treatment, and that is suppressed excretions. So long as the stomach is intact, and the appetite and digestion good, an immense quantity of stimulant may be disposed of without serious immediate consequences; but when the organs finally, from constant excitation, become engorged, nutrition ceases, and the alcohol is retained more in the blood, instead of being carried off by excretions, and wild delerium soon follows.

It is plain, under these circumstances, that the indications are to establish the excretions, disgorge the system of the alcoholic poison, and to introduce proper nutriment. The first two are accomplished by one and the same means. The stomach is generally irritable; at least there is frequent vomiting; but it is owing to the accumulation in the stomach of morbid secretion, rather than from inflamation or even irritation; for calomel in small doses, frequently repeated, arrests it with great certainty. If the subject is governable, and will take medicine willingly, colomel should be given in two or three grain doses every hour, or oftener if the case is urgent, until fifteen or twenty grains are given: if medicine has to be given by force, it is best to give a full dose at once; and this is the better, for in the worst cases the stomach is not nauseated, and the sedative effect of a large dose of calomel calms the nervous excitement, and at the same time produces the appropriate effect upon the excretory organs and mucous coat of the stomach and bowels. It requires some hours for this effect to be produced, and it is improper to give anything to promote its action upon the bowels under ten or twelve hours, and I think even a longer time would be better, if the case is not urgent. Small and frequently repeated doses of saline medicine are the best, after the calomel (sulphate of magnesia is best), which promotes the excretions, disgorges the stomach and bowels, and clears the system of its alcoholic poison, to its great relief. An active cathartic may afford some relief, but the system is not so well disgorged by it; more or less

serum from the blood is carried off, causing weakness; while, in the other process, by giving time before the action of the calomel, and then promoting it by gentle but continued means, the organs exercise a selection in excreting, and thereby a large amount of effete matter is discharged, and the patient feels the stronger for it, being freed from an incubus that was weighing it down, and producing apparent exhaustion. After this process, we should lose no time in introducing nutriment, and for this purpose milk is most universally applicable; and as the mucous membrane of the stomach seems to be denued of its epithelium, the addition of lime water renders it particularly grateful and soothing. Patients in this condition generally loath animal substances, but milk is almost always grateful to the taste, and is particularly appropriate for it furnishes the most innocent solid for the bowels, that have been long deprived of their wholesome stimulus, If it should happen that a patient could not take milk, well boiled cornmeal gruel is the next best diet most likely to be relished; and for something more substantial, strong, well-seasoned broth, frozen, will be the most likely to agree.

In all acute cases, alcoholic stimulants should be withheld, for they act like poison and will often bring back delirium. Should stimulants be thought necessary (and it is often really necessary) the carbonate of amonia, or the aromatic spirits of amonia are preferable; or it may be proper, in some cases to allow malt liquor. Opium in all forms should be prohibited, until the system is relieved of its alcohol and even then I find it can generally be omitted; and when it can be, the patient recovers sooner and better. The patient is not expected to sleep well, but if the blood is renewed by its appropriate nutriment, natural sleep will soon follow.

Occasionally, when, previous to the debauch which immediately caused the mania, a free use of stimulants had been indulged in for some time, we have an exalted state of the nervous system, attended with hallucinations and sleep-

lessness, which require special attention. Potent stimulants operate badly, and opium alone does not operate well, though in large doses sleep may be forced, though not without some risk, in some cases, to the brain ; but equal parts of morphia and tart. antimony, given in small and repeated doses, will soon calm the nervous system and induce sleep without injury either to the brain or stomach. There is nothing that cools off the heated imagination in these cases like nauseating doses of tart. antimony; and opium in some form may be added, if it is thought necessary. The too general opinion that sleep is the all-important thing in this disease has led to fatal errers in treatment. Opium, given freely, as it often and very generally is, while the blood is charged with alcohol, produces a very unfavorable effect upon the nervous system, and tends to check the excretions, which are already diminished, and the patient, without being narctized, often goes into a stupid state resembling the effects of urœmic poison; and if about one-half (about the usual proportion), by the vigor of their constitutions, weather it, in spite of all the poison imposed upon them they recover slowly, and their organs are left in a bad condition."

We make this lengthy extract from Prof. Stone's communication on this subject, because he makes the important distinction between delirium tremens and Mania a Potu, and in his usual clear manner points out the rational treatment in the two forms of the affection. These views we think should be more thoroughly impressed upon the profession. Notwithstanding we are satisfied that the difference in the two forms of alcoholic poison is clear, and the treatment of Dr. Stone is the rational treatment yet, the Mania a Potu that has occurred in this city for the last few years, has been remarkably fatal, and all methods of treatment very unsatisfactory.

Therefore I determined to try the Tict. Digitalis in large doses. Recently, two cases presented an opportunity. The first a man, the second, a woman. A description and treatment of one case will describe both in all essential particulars. Mr. ———, after a debauch of several weeks, and

while yet stimulated to as great a degree as all the varieties of alcoholic drinks could produce; in attempting to light a cigar, fell upon the floor in the most frightful convulsions raving, and foaming at the mouth, and mutilating his lips, tongue, hands and arms with his teeth. In half an hour after this convulsion, he was furiously delirious, recognizing no one, muttering his imaginary fears, and now and then making fearful struggles to escape from his bed, his face almost livid, eyes deeply injected and eyelids greatly swollen, pulse one hundred and sixty, weak and thread like.

In the interval of convulsions, and before my arrival, one half a grain of morphia had been administered to him. I imediately administered five grains of ipecac and two grains tartar emetic, and repeated it every fifteen or twenty minutes, until he had ejected everything from his stomach. This occupied several hours when his symptoms were not in the slighest improved. I then determined to watch the action of the digtalis and commenced by administering a large teaspoonful evry half hour. The first dose improved his pulse; it diminished in frequency and increased in volume. The second dose lessened his ravings and made a more palpable improvement in his pulse. The third dose was increased one half, when all of his symptoms in one hour, were manifestly improving. I then increased the dose and lengthened the time of administration. In about seven hours from the taking of the first dose his pulse was full slow and regular. I then continued the Tinct. Digitalis in small doses and gave a mercurial cathartic. His sleep became sound and tranquil, he awoke in about six hours, sane in mind and almost well in body. The only remaining vestige of disease was extreme nervousness. I then prescribed Tinct. Valerian and compound tincture of cinchona in equal qantities. The second case was almost as severe as the first and was treated in like manner and resulted as favorably. If Digitalis acts by sedation, will not Veratria be a more efficient remedy in Mania a Potu?—*St. Joseph Medical & Surgical Journal.*

AMERICAN DIPLOMAS.

The difficulties which the Medical Council have encountered in resisting the claims of many uneducated and unintelligent persons holding American diplomas in Medicine and Surgery, have evoked the expression of sympathy and shame from the more respectable section of the medical profession across the Atlantic. They avow frankly, that such diplomas are, in a large number of cases, wholly destitute of value. They afford no indication either of intelligence, study, skill, or good conduct. The graduate of an American chartered medical college, or the licentiate of a county or state medical society, may be an educated and accomplished gentleman, or he may be an ignorant quack-salver, destitute of any claim to that title. It is right that this should be widely known, and that we should reflect upon the authentic avowal of a respected American journalist. An American medical contemporary states that the ease with which charters are now obtained from State Legislatures, for every nondescript association of men, whether for proper or improper purposes, has effectually broken down all safeguards to respectability, and thrown the field of Medicine widely open to every species of adventurers. Charters are granted by State Legislatures to any and every body of men, for any and every conceivable purpose, without distinction or reserve. At nearly every session a batch of medical institutions are chartered, embracing every shade of quackery; and these equally with the respectable and legitimate schools of medicine are entitle to confer the degree of M. D., and to represent themselves abroad as universities. It is difficult to imagine a more deplorable state of confusion than such reckless State patronage of ignorance and quackery must produce. Already it threatens to disorganize the educational system of the profession in America; for adventurers are thus freely enabled to purchase that academical status which only education can confer in other countries. The

inevitable result must be, that since we have no means of distinguishing here, amongst the multitude of American colleges, those which apply the necessary tests to their members from those which admit the most unworthy persons, American diplomas will fall into discredit, and will be regarded as of no value. The remedy which it is proposed to apply is of a local character; and the American Medical Association taking cognizance of this state of things, it may result that the test of respectability which degrees fail to afford will be furnished by admission to that and other associated societies. It is obvious, however. that this voluntary test will have only a partial and local value. Meantime, it would appear that even the most respectable colleges are not free from taint. A protest has been forwarded us, emanating from the Newark Medical Association, N. J. in reference to a diploma granted by the New York Medical College, which has always held a high place amongst the trans-atlantic educational institutions. From the protest and resolutions drawn up by this Association and assented to by others, it appear that the person to whom it was granted was a man who had for years painted and peddled window-shades, and subsequently became a dealer in quack pills and salve; that he was a grossly ignorant person; and his "examination, both by the faculty and the censors, must have been conducted in the most unjustifiably careless manner;" all which is respectfully submitted to the American Medical Association, with sundry suggestions "to remove the reproach cast upon the profession by the conferring of the diploma upon so unworthy a person, and prevent a repetition of similar grievances in all future time." The New York College has refused to revoke the degree. The Medical Association is called upon to enforce the revocation, or to exclude the College from representation at its meetings. This disposition to invoke the influence of the Medical Association as a tribunal of appeal of the highest grade has now become a remarkable feature in the politics of American Medicine. It springs, undoubtedly, from the worthlessness and ineffi-

ciency of a large number of the chartered medical colleges, and is a strong practical comment upon the injurious effect of that reckless distribution of charters, of which the Medical Council is bound to take careful note in the interests of British Medicine.—*London Lancet.*

URTICARIA AS A SYMPTON OF IRRITATION OF THE FEMALE SEXUAL ORGANS.

BY PROFESSOR SCANZONI.

Professor Scanzoni observes that although it has long been known that chronic affections of the female sexual organs are not infrequently accompanied by skin diseases (urticaria, eczema, acne, psoriasis chloasma, etc.,) the influence of a more sudden irritation of these organs upon the cutaneous surface is by no means so well established. He has been enabled to find no very definite statements upon the subject, and this leads him to communicate some cases tending to establish such a consensus.

A lady, aged thirty-five, had been under his care for some time with slight retroflexion of the uterus and chronic metritis, when he ordered four leeches to be applied to the vaginal portion of the cervix uteri. This little operation had been already performed once before without any ill effect, but upon the present occasion, ten minutes after the application had been made, the patient was seized with violent febrile action, and slight delirium. In half an hour she was seen by the author, who found her skin, and especially that of the face and upper part of the body, almost of a scarlet red. The temperature of the surface was considerably raised, and her pulse beat 136. She continued much the same during the night, and when seen next day, the face, neck, chest, arms and thighs exhibited with the intense redness, innumerable urticaria elevations. In a day or two the exanthem had entirely disappeared, a dis-

tinct desquamation, however, taking place on the face and neck. As this was the first case the author had ever seen in which these symptoms followed the application of the leeches to the cervix, he did not believe in their dependence upon this, and again ordered them to be employed. Four times this was done without any unpleasant occurrence, but on the fifth occasion the whole series of symptoms above described were reproduced, and that so rapidly after the biting of the leeches, that any doubt as to cause and effect could no longer be entertained.

In a second case, a woman aged eighteen, was admitted into the Wursburg Midwifery Institution on account of chronic uterine infarctus, and five leeches were ordered to be applied to the cervix. Scarcely had they taken hold, when she complained of the most violent labor-like pains in the abdomen, and although these soon moderated in force, they were accompanied with such intense febrile action that the entire body glowed with heat, the pulse rose to 140, the carotids pulsated visibly, and the face, neck and chest, exhibited an intensely red color, to which were added in a very short time a large eruption of urticaria elevations of a palish color. The eruption was accompanied by great headache, inclination to vomit and excessive lassitude, symptoms which continued to the following day, although the exanthem with the accompanying fever disappeared entirely after three hours' continuance. This patient often had suffered from urticaria at the menstrual periods, without, however, its being accompanied by such violent symptoms.

The third case occurred in the person of a young lady, aged twenty-six, who on account of long-continued chronic oophoritis and metritis, required blood-letting. In the course of sixteen months four or five leeches had been applied eight times. On the ninth occasion, an intense redness covered the skin, and the patient complained of the most violent pain in the head. The temperature of the surface was much raised, and it was almost entirely cover-

ed with innumerable, minute, prominent elevations. In the course of an hour these appearances gradually subsided, the headache continuing for twenty-four hours longer. The author is aware of a fourth case of the same kind, but is unable to furnish the particulars.

Professor Scanzoni believes that these cases deserve the attention of those occupied with the diseases of women, as well as of dermatologists. They admit of no other explanation than the irritation of the uterine nerves, caused by the bite of leeches, induced an entirely unusual, and in its mode of origin inexplicable, disturbance of the vascular system, which again, in a mode which is to us equally unintelligible, gave rise to the production of the eruption of urticaria. In proof that these appearances were not produced as a consequence of any poison being conveyed through the medium of the bite of the leech, it is to be observed that similar symptoms never result from the application of leeches to other regions of the body, while it is to be observed that even very slight irritation of the sexual organs, as that produced by examination with the finger or speculum, or by the application of caustic, will, in many sensitive women, give rise to erythema of the face, neck, breast, etc., which disappears as rapidly as it comes on.—*Wurzburg Medicin. Zeitschrifts*, band i, pp. 90–95.

ON THE USE OF MULLEIN (VERBASCUM THAPSUS) IN CHRONIC BRONCHITIS

BY H. WILSON, M. D., OF BOONSBORO', MARYLAND.

Chronic bronchitis is universally admitted to be one of the most obstinate and difficult affections with which physicians have to deal. This difficulty proceeds more from the locality than the nature of the disease; more from a want of access to the mucous membrane of the bronchiæ, than from the absence of proper remedies to control th

affection. Counter-irritation and the inhalation of chlorine, iodine, and expectorants, with such like means, have been used for centuries, but all physicians know, from experience, that the benefits derived from their use are merely temporary and palliative, and seldom bring about a radical cure; still they are the best remedies which we have at command, and it is but right that we should avail ourselves of their medicinal virtues. The long standing inflammation of the lining membrane of the bronchiæ seems to demand the contact and application of some powerful agent, in order to produce a new impression, and thereby change the morbid action of the part, before a healthy reaction ensues.

* * * * * * *

The frequency with which bronchitis is met among clergymen and others, renders the discovery and use of any means which may be serviceable, either as palliative or curative, a matter of importance. For several years past I have been in the habit of using a remedy, which may not be new, but which far surpasses that of any other which I have tried in relieving, and, in many instances, entirely eradicating the affection. I refer to the leaves of the common mullein, (verbascum thapsus,) dried, and smoked in a pipe. In that form of the disease in which there is a dryness of the trachea, *with a constant desire to clear the throat*, attended with little expectoration and considerable pain in the part affected, the mullein, smoked through a pipe, acts like a charm and affords instant relief. It seems to act as an anodyne in allaying irritation, while it promotes expectoration and removes that glutinous mucus which gathers in the larynx; and at the same time, by some unknown power, completely changes the character of the disease, and, if persevered in, will produce a radical cure.

In no respects are its beneficial effects more striking than in its power of immediately allaying the desire of "clearing the throat," which is a source of constant an-

noyance to the patient, and which is so apt to disturb his rest at night. The remedy needs but to be tried to prove its efficacy.

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The mullein may be gathered from almost any field at all seasons, and should be first dried, and the leaves smoked in a pipe like tobacco, at least two or three times a day. It is not unpleasant, and, unlike tobacco, requires almost constant smoking or drawing, or the fire will go out.

The remedy is simple and harmless, but potent. It is one of those means which nature has so bountifully supplied, which are within the reach of all, and is but an evidence that we need not report to chemical combination for all our most valuable remedial agents; but if we look around, we may find them at hand ready for application.—*Journal of Materia Medica.*

NEW TEST FOR DIABETES.

Dr. E. C. Bidwell communicates to the Boston *Med. and Surg. Journ.* (Nov. 22, 1860) a process which he claims as a new test for glucosuria. His proposed test, he says, if not preeminently scientific, is nevertheless facile and reliable. He converts the saccharine element of diabetic urine into *caramel*, by heat. Upon a clean slip of tinned iron are placed one or two drops of the suspected material, which is then held over a spirit lamp; the fluid will speedily evaporate, leaving scarcely a trace upon the surface of the metal. The application of the heat is continued, and in a few moments after the completion of desiccation, a spot, about an inch in diameter, over which the drop has spread with the first ebullition, will gradually assume a rich reddish brown color, with a brilliant lustre, having the appearance of Japan lacquer. The application of a stronger heat produces a darker color, but the lustre continues until the intensity of the heat decomposes the substance. Dr. B. claims

great success in his experiments, with this new method, which is far superior to those tests found on either fermentation, or on the reduction of metallic oxides, which latter, besides being complicated and inconvenient for clinical use, are liable to various fallacies.—*N. O. Med. News and Hospital Gazette.*

CHLOROFORM VAPOR IN EAR-ACHE.

The use of oil and chloroform in ear-ache is familiar to many. A recent case treated by Dr. L. D. Ford, of this city, developes the use of chloroform vapor for this affection on a method which proved highly satisfactory. The patient, a child, suffered severely, and other remedies failing, Dr. Ford used the following extemporaneous expedient:

Taking a 2 oz. vial, a small opening was punched through the bottom, a little cotton wool soaked with chloroform was then put into the vial. The mouth of the vial was now applied to the external meatus. The attendant then placing his lips to the punctured extremity of the vial, *blew the vapor into the external ear.* The relief was instantaneous, and the patient soon fell asleep, being cured by this single local application. We commend the above method as well worthy of trial in cases of this painful affection of childhood.—*Southern Med. and Sur. Journal; St. Joseph Med. and Surg. Journ.*

CANNABIS INDICA AS A HYPNOTIC.

Dr. Fronmuller, after a large number of experiments, draws the following resume of the value of this drug.

Of all anæsthetics ever proposed, Indian hemp is the one which produces a narcotism most closely resembling the

natural sleep without causing any extraordinary excitement of the vessels, or any particular suspension of secretions,or without fear of a dangerous reaction, and consecutive paralysis. It acts neither as violently nor as surely as opium. It can be given in all acute inflammatory diseases as well as typhoid affections. It is well adapted as an alternate with opium in case this ceases to act. Its best mode of administration consists in pills of the alcoholic extract and powdered seed. The smallest dose susceptible of producing sleep is eight grains in pills of one grain. This dose, however must be rapidly augmented. The action on the skin, the kidneys and sexual organs, attributed to Indian hemp is without any practical importance.—*Prayer Vierteljahrschrift,* 1860.—*Journal of Materia Medica.*

DIGITALIS IN DELIRIUM TREMENS.

A few weeks ago, we mentioned in our periscopic department, the treatment of delirium tremens by large doses of the tincture of digitalis. In the Oct. 13th number of the *Med. Times and Gaz.*, Dr. Ballard coroborates the statements of Mr. Jones. as to the efficacy of this treatment, and gives several additional cases. "My own impression," he says, "from what I have seen and heard from Mr.Jones is, that in tincture of digitalis,we have a true *counter-poison*—an addition to that class of mutual antidotal poisons of which opium and belladonna have been the most recent example. Alcohol is the remedy by which we counteract the depression produced by digitalis; the converse is also true; digitalis is most remarkably an antidote for alcoholism."

The article recently copied from an English journal on the administration of very large doses of the tincture of digitalis in delirium tremens has attracted much attention.

The English officinal tincture is of the same strength as that of the U. S. Pharmacopœia. A practitioner of this city has informed us that he has frequently prescribed the tincture in drachm doses during acute inflammations, but the use of the article in half-ounce doses in conditions in which the arterial sedative effect is not apparently indicated seems extremely hazardous. Yet it is claimed that the effects of digitalis in inflammatory affections and in delirium tremens are exactly contrary. In inflammatory disease it subdues and regulates the pulse, whilst in delirium the pulse by it is increased in force and fullness.—*Journal of Materia Medica.*

VENTILATION AT NIGHT.

An extraordinary fallacy is the dread of night air. What air can we breathe at night but night air? The choice is between pure night air from without and foul night air from within. Most people prefer the latter. An unaccountable choice. What will they say, if it is proved to be true, that fully one-half of all the diseases we suffer from, is occasioned by people sleeping with their windows shut? An open window most nights in the year can never hurt any one. In great cities night air is often the best and purest air to be had in the twenty-four hours. I could better understand in town shutting the windows during the day than during the night, for the sake of the sick. The absence of smoke, and quiet, all tend to make night the best time for airing patients. One of our highest medical authorities on consumption and climate has told me that the air of London is never so good as after ten o'clock at night.—*Florence Nightingale.—New Orleans Medical News and Hospital Gazette.*

Editorial Department.

TO THE FRIENDS AND PATRONS OF THE NORTH CAROLINA MEDICAL JOURNAL.

In assuming our Editorial duties, we deem it proper to make the following statement of facts, for the purpose of showing why we have not entered upon our labors at an earlier day.

At the annual meeting of the State Medical Society, held at Washington in April last, Dr. S. S. Satchwell and ourself were appointed to take charge of the Editorial department of this Journal, as soon as Dr. Warren, who was about to remove from this state to Baltimore, should complete his second volume, which he was engaged upon at that time. It was then believed the late Editor would complete his labors in time for us to bring out the first number of the third volume long before the close of the year. We were disappointed in these expectations. The closing number of the second volume was only received by us during the first week in December. That prevented our getting to press before the first of the present year, and clearly shows that this delay has been unavoidable on our part. The late Editor had many real troubles on the score of timely issues. We sincerely hope to escape them all. Situated as we are, at the capital of the State, and in the midst of publishing establishments, whatever faults our Journal may have in other respects, we will not be able in future to render any excuse for failures in this particular.

Being thus compelled to commence our labors with the beginning of the year, we shall so date the first number of the third volume of the North Carolina Medical Journal.

In regard to ourselves, we wish to state that it will be our pleasure, as it shall be our constant endeavor, to make the N.

Carolina Medical Journal acceptable and useful to its readers. In order, however, to accomplish these desirable objects, we hope our friends in this state, especially the members of the State Medical Society, will render us all the assistance they can, by making this Journal the vehicle of their thoughts, and the channel through which their skilful experience and useful observations may be heralded abroad. Our regular practitioners of medicine are a laborious, experienced and skilful class of men; but their time is almost wholly occupied with incessant practical labor, reflection and reading. They write but little. Let them add to the profitable enjoyment of reading, during some of the few hours they are able to snatch from the more arduous labors of their profession, that other pleasure and useful employment of writing out their observations and thoughts for publication in their home Journal. By so doing, they will add to their fame and usefulness at home and abroad, besides ensuring the success of this undertaking, a matter in which every true son of Æsculapus, within the borders of the ever faithful and good old State, should feel a just and hororable pride. It must be remembered that, this is not an individual enterprise, but a work instituted by the Medical Society of the State of North Carolina for the inculcation and dissemination of scientific principles in the practice of medicine, and for the promotion of the general interest and welfare of the regular profession. The Society itself has had its claims to respectability, usefulness and importance duly recognized by the General Assembly in an act of incorporation, and in having been specially chosen by that honorable body to discharge the high and responsible duty every six years of selecting from among its regular members, those persons, who shall for the time constitute the Board of Medical Examiners for the State.

Such is the origin, and such are the objects of this Journal; and we feel persuaded that the regular members of the profession in North Carolina, particularly those belonging to the State Medical Society, upon whom we believe we have

the right, under all the circumstances of the case, to call for material aid and support, will not permit it to perish.

It is true we have commenced our labors under the most *discouraging circumstances*, and in perilous times. But as it is not necessary for us to parade these *circumstances* before the public, and as it would be in very bad taste to do so, we shall simply ask for a little indulgence, until we get better seated in our editorial chair, with such surrounding and facilities for the work in hand as we certainly do not possess at present, but as certainly mean to command. In a word, we only ask for that courtesy which the members of polished society and literary circles always extend to accredited strangers.

With these feelings, and with a firm resolve to do our best, in the absence of our Associate Editor, Dr. S. S. Satchwell, who is at this time in Paris, and in the face of all the troubles of the times, we hopefully send forward our messenger.

CHAS. E. JOHNSON.

DR. MANSON'S REPLY TO DR. HOWARD.

We commence, in this number of the Journal, Dr. Manson's reply to Dr. Howard's review of the former gentleman's essay on Malarial Pneumonia. This subject will be continued in each number, until Dr. Manson has completed his reply. It will be remembered that this is done in accordance with an order passed by the Society at its meeting in Statesville, in the spring of 1859, in order to give Dr. Manson a fair and impartial hearing by the same public whom Dr. Howard addressed. We ask for Dr. Manson's reply a careful perusal and a deliberate judgment.

DIPHTHERIA.

We call atiention to the admirable article on Diphtheritis, in this number of the Journal, from Dr. Hartmann, of Cleaveland, Ohio. This subject is one worthy of our most careful thought and matured consideration. Therefore, we make no apology for the length of the article.

This disease is gradually spreading over our whole country, and wherever it makes its appearance gloom and melancholy follow in its train. Anything then which is calculated to awaken the professional mind to the fearfulness of its character, and yet, at the same time, to arm the practitioner of medicine against its fatal inroads, should be gladly received. It is in this spirit we lay before our readers, this long, elaborate, but able essay.

We have had this disease in our midst, but like all other epidemic visitations with us, it has been characterized by mildness. In a population of five thousand souls, there has not been more than five or six deaths from it.

Situated on the eastern slope of the primary formations, and occupying very nearly a middle position in the State, we are, of course, liable to the diseases of the eastern or paludal districts on the one hand, as well as to those belonging to the higher, hilly and mountainous regions on the other. But these diseases, whether more properly belonging to the one or the other section, never prevail extensively with us, or assume a virulent type. Indeed, Raleigh may be said emphatically to be a healthy place.

BLOODLETTING—STIMULANTS.

We are not Sangrados; nor are we unqualified admirers or followers of the theory and practice of Drs. Todd and Bennet. We think that truth lies in neither extreme; while a spirit of conservatism and sound principles require

that the course of practical medicine should conduct along the middle paths. *In medio tutissimus ibis*, is as true in medicine as in anything else. Surely, then, it is the wisest course for medical men to adopt, because it is the only one that will certainly enable them when endeavoring to avoid one danger or mistake not to fall into another. For example; we believe that in many instances, the judicious use of general and local blood-letting will save much precious time and many valuable lives, and prevent often times the occurrence of troublesome sequelæ; while on the other hand, we know that the indiscriminate employment of tonics and stimulants will be followed by evil consequences. Under these convictions, and for the purpose of showing how some of tho leading professional men of this country are awakening to a just sense of their duties and responsibilities in the premises, we have selected from the "Philadelphia Medical and Surgical Reporter," the remarks of Dr. Saml. Gross on "*The tendencies of the present day in regard to the doctrine of debility and the treatment of diseases by stimulants.*"

We regret that our limits forbid our copying the whole of the discussion on this subject before the "Philadelphia County Medical Society," as rendered in the "Reporter." The paper read by Dr. Gross seems to have been eminently suggestive, for it produced a lengthy discussion, in which Drs. Coates, Condie, Darrach and Henry Hartshorne, took part.

AMERICAN DIPLOMAS.

We have copied from the number of the London Lancet for November, 1860, an article upon this subject, showing what little importance the English, after a while, will place on the Diplomas granted by Medical Colleges in this

THE BALTIMORE JOURNAL OF MEDICINE.

This is a Bi-Monthly Journal, and is edited by Edward Warren, M. D., Professor of Materia Medica and Therapeutics in the University of Maryland. We have received the first number of this periodical, and extend to it a cordial welcome. It is gotten up in handsome style, and is an able and spirited production. We wish the Journal and its talented editor every success.

NORTH CAROLINA

MEDICAL JOURNAL.

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Original Communications.

A Reply to Dr. W. T. Howard's Review of the "Essay on Malarial Pneumonia," which appeared in the Transactions of the Medical Society of North Carolina.

BY OTIS FREDERICK MANSON, M. D. MEMBER OF THE MED. SOC. OF N. C.

(*Continued.*)

THE HEADACHE OF MALARIAL PNEUMONIA.

The next symptoms in regular order, we have thus noticed under the head of the "General Course and Progress" of this disease:

"*Pain in the side* of the pleuritic character is generally next experienced, it being absent in very few instances. To the reactive fever, dyspnœa and cough soon succeed. In some cases the cough is tardy in its appearance, or is so slight as to elude the notice of the patient and physician. *Headache, Nausea* and *Vomiting* are *very frequent* and *prominent* symptoms, and frequeutly precede the cough and pain; the fluids ejected from the stomach being *usually* of a bilious character."

As our reviewer and ourselves do not differ very essentially in regard to any of these symptoms, except as to the character and frequency of the *Cephalalgia* in its bearings upon the diagnosis, it will not be necessary to dwell upon any

save the latter as a prominent and important feature of this affection. Our reviewer has the following observations on this symptom:

Headache is a "very frequent and prominent" symptom of most acute affections of a febrile and inflammatory character, and is by no means infrequent in trivial disorders. Pneumonia, of whatever form, offers no exception to this law. Walshe states that in the ordinary acute form, *cephalalgia* is of frequent occurrence, and comes on with the outset, as part of the febrile state. According to Wood, the fever is very often attended by *pain in the head*, especially about the brows or forehead, from which the patient may even suffer more than from the pain in the chest: and occasionally, the *headache* is the only symptom of which the patient complains for the first few days.(*a*) Dickson mentions the occurrence of *headache*, with pains in the back and limbs, and nausea even to vomiting.(*b*) Other authors, also, notice the presence of *headache*, as supervening upon the reactive fever. (*c*) It was absent in only 8 out of 57 cases observed by Louis; commencing at the onset, it ceased after the eighth day.(*d*) Grisolle regards *cephalalgia*, as among the most frequent sympathetic phenomena, having found that in 125 cases in which it was sought with care, there were only 20 which never presented it at some time during the sickness. In the vast majority of cases, it occurred in the beginning—there being only three exceptions to this rule in his experience. In *five-sixths* of the cases, it manifests itself in the forehead.(*e*) *Headache, then, is common alike to simple and 'malarial pneumonia.'*"

Whilst we readily admit that headache is a very frequent and prominent symptom in many febrile and other affections, and whilst we cheerfully yield assent to the statements of the authorities cited by our reviewer, that this symptom may often be present in other forms of pneumonia, yet we by no means concur in his curt and abrupt conclusion which is as erroneous as it is indefensible, that "headache is *common alike* to simple and malarial pneumonia," and we are prepared to prove, not only by the admissions

(*a*) Op. cit. vol. ii, 2.
(*b*) Op. cit. 605.
(*c*) Barlow, op. cit. 188, C. J. B. Williams op, cit. vol. iii, 590.
(*d*) Anatomical, Path. and Ther. Researches on Typhoid Fever, 11,114,
(*e*) Op. cit. 276.

of our critic himself, but by the testimony of others more competent and authoritative on the subject, that the cephalalgia in this affection is not only *more* frequently present, but is also more intense in its violence than in the Idiopathic form of writers, besides possessing other distinctive peculiarities. If we embrace the views borrowed from La Roche, which our critic upholds, that this disease is a "*true* pneumonia, complicated by the accidental impression of a malarial law," in which "the *leading phenomena* of Remittent fever are *engrafted upon* and *blended with* the rational symptoms of *ordinary* pneumonia," then we shall be forced to admit that our critic in his hot haste to discredit the correctness of our delineation of the disease, has precipitated himself into a dilemma from which there is no escape. It could never be questioned by those who possess an intimate practical acquaintance with remittent or any other form of malarial fever, and will not be opposed by those who are at all conversant with the literature of the subject that in this class of diseases the phenomena referable to a morbid condition of the great nervous centres are the most conspicuous and important presented to the observer, nor "can we fail to be impressed," as M. Briquet truly remarks,* "when we view the numerous authorities who from the period at which medicine was first cultivated with precision, have associated intermittent diseases with the nervous system. Among them Bellini, Boerhave, Selle, Borelli, J. P. Frank, Brugnoni, Reil, Hufeland, Hildenbrand, Forni, Trnka, Van Swieten, Petit-Radel, Fodéré, Voulonne, Alibert, Guerin de Mamers, Waidy, Georget, M. M. Rayer, Bricheteau, Brachet, Nepple, Montgellaz, have placed their seat in a morbid alteration of this system. Others, as Cullen, Giannini, Stahl, Roche and Broussais, in explaining intermittent fevers in their own manner, acknowledge that they are composed of actions which are principally produced through the intervention of the nervous

*Traité Therapeutique du Quinquina, 2me ed. p. 335, Paris, 1855.

system; whilst all of these physicians positively admit that the nervous system is the theatre in which are exhibited the principal symptoms which constitute a paroxysm of fever.

So prominently marked indeed are the perturbations of the nervous system, and especially those of the cerebro-spinal axis that M. M. Rayer* and Guerin de Mamers† have taught that *malarial fever* should be considered as a *cerebro-spinal neurosis;* and M. Maillot‡ guided, not only by the symptoms observed during life, but sustained as he contends by post mortem revelations, has treated them under the designation of "*Cerebro-Spinal Intermittent Irritations.*" Whatever may be, however, the views which authors entertain of its pathology, all writers upon this subject are in harmonious accord in regard to the painful condition of the *nervous system of relation* in all forms of Periodical fever, and all unite in the opinion that Headache is the most prominent as it is the most intense and agonizing suffering experienced by the patient.

"*Pain in the Head,* back and limbs," says Bartlett (a high authority with our critic) "is one of the most constant, and in many cases one of the most distressing accompaniments of this disease. Cleghorn says he has sometimes known this pain so *intolerable* and accompanied with such *inexpressible anxiety* that persons of the soundest judgment and morality have been *tempted* to *destroy themselves* to *get rid of it.* Dr. Stewardson found *headache* present in all but *one* of *sixteen cases,* terminating in recovery. It generally commenced on the first day of the fever, was *most severe* during the *exacerbations* and commonly *declined* after the middle period of the disease, at least during those hours of the day when the patients were visited. Dr. Boling gives the following account of this symptom as it shows itself in severe

*Dict. de Med. (en 21 vols.) tome xii, pp. 388–390, Paris, 1825.

†Journal des progrès, 1830, tome ii et. iii.

‡Traité des Fièvres ou Irritations Cérébro, Spinales Int. Paris, 1836.

cases. "As the febrile excitement is developed in the first exacerbation, *pain in the head* becomes *violent* and *distressing* and is of a *throbbing* character. It is generally in the forehead just above the frontal sinuses, but is also occasionally felt in the occipital region. During the earlier remissions it either abates or entirely subsides, but later, is *very distressing during the remissions.* At this period too, it looses its throbbing, pulsating character, and is *fixed* and *steady.*"*

Wood, whose treatise on the Practice of Medicine, according to our critic "is the Prayer Book of the American Medical Practitioner," declares that "the patient *almost always* complains of *headache* which is often *severe*, *tensive* or *throbbing*, and in *most instances the source of greater suffering than any other cause.*"†

Drake, in his chapter on Remittent fever after observing, that the *Headache* consists of a "dull pain" in the *forming* stage, which in the chill "grows *worse*," in the exacerbation "becomes *more acute*," and that in the *remission* there still "*remains* a dull aching of the *head* and back."‡

Valleix states that "in the chill that *cephalalgia* of a variable intensity is one of the symptoms which next to the shivering, elicits the most complaint from the sick," that in the exacerbation the headache *persists* or even *augments*, and that "in the *remission*," a slight *pain in the head remains.*"‖

Maillot characterizes the *headache* as *intense*, (vive céphalalgie.")§ Briquet terms it an *atrocious headache* ("une céphalalgie *atroce*,")¶ and Nepple as an *intense pain* in the *forehead* (*céphalalgie frontal intense.*")††

Eberle, a favorite authority with our critic, observes that in *Remi t'ng fever* "*aching pains* in the *Head*, back and ex-

*Fevers of the United States (pp. 313–14,) Phila., 1847.

†Practice of Medicine, 3rd ed. vol. 1, 266.

‡Diseases Int. Valley, N. A., 2nd series, p. 96.

‖Guide du Médecin Practicien, 3me ed. Tome v, p. 550.

§Traité des Fièvres, p. 15, Paris, 1846.

¶Traité Therapeutique due Quinquina, 2me ed., p. 381.

††Essai sur les Fièvres Remittentes et Intermittentes, p. 100, Paris, 1828.

tremities are the prominent symptoms of its initial stage, and that when the fever is once completely established, the *pains in the Head*, back and lower extremities become *greatly aggravated.*"

It will be seen from this examination, that according to the most popular writers on the subject—the majority of whom our critic approvingly endorses on other points—that *Headache* is a *constant, conspicuous* and intensely developed phenomenon in Remittent fever, being *present* in the prodromic stage and in the *chill;* becoming *more violent* and agonizing in the *exacerbation*, and often clinging to the patient in the *remission*, thus constituting a prominent and important characteristic, not only in its extreme development, but still more in the periodical variations of its violence. Yielding then for a moment to the positions of our Reviewer, that malarial pneumonia "is a *true* pneumonia complicated by the impression of a malarial law," in which the "*leading phenomena* of Remittent fever are engrafted upon and blended with, the rational symptoms of ordinary pneumonia," and admitting at the same time that Headache is a frequent and prominent symptom in the simple form, these concessions can only lead to a direct and positive refutation of the position of our critic that "Headache is common alike in simple and malarial pneumonia," for being (as we have seen) a symptom almost universally present in Remittent fever, and also, as he avers, a frequent and "prominent symptom in pneumonia of whatever form," it necessarily follows that it must be more certainly and constantly present in the malarial variety, in which, according to our reviewer's own statement, the leading phenomena of Remittent fever are engrafted upon and blended with, the rational symptoms of ordinary pneumonia.

But we have better and more competent authority to refute the unsustained, inconsistent and barren conclusions of our critic, that "Headache is common alike to simple and malarial pneumonia," than any argument derived from his own admissions. The testimony of M. Grisolle, whose

treatise on Pneumonia, our reviewer endorses as "possessing a character of completeness which in the present state of our knowledge could not have been given to the history of any other disease," and whom he extols as "the greatest of all modern standard authorities on the subject of pneumonia," will not of course be repudiated on this point. This author although uniting with M. Louis in regarding cephalalgia as among the "most frequent sympathetic phenomena of simple pneumonia," does not sustain our reviewer when considering this symptom as a differential diagnostic. In his section on Bilious Pneumonia which as we shall see hereafter, he has erroneously erected into a form of pneumonia as distinct and different from his Intermittent and Remittent Pneumonia, this author emphatically declares that in the bilious form, "La céphalalgie toujours limitée au front etait gravitative et *persistait plus long temps* que dans les phlegmasies *ordinaires.*"*

"From the *intensity* of the Headache," said Dr. Chapman who doubtless had witnessed all forms of pneumonia, "the disease has been properly called *Pleurisy of the head.*"†

"The Head," says Dr. Condie in a note to Watson's Practice," being *almost invariably* affected before the pneumonic symptoms are developed, it is often called *Pleurisy* of the *Head.*"‡

Among the "signs which *distinguish* this disease," which he terms "*Intermittent Pneumonia,*" Dr. Constant†† remarks that "*Violent Cephalalgia* is one of the earliest symptoms being either frontal or sincipital and is often accompanied by severe lumbar pain which observes the same stages of *increase* and *decrease* as itself." "*Acute pain* in the *forehead,*" said Eberle whom our reviewer quotes as giving "no meagre description of this disease," and of whose brief notice he endorses the "opinion of La Roche," "that it embodies

*Traité de la Pneumonie, p. 404.

†Benedict's Compendium of Chapman's Lectures, p. 217.

‡2nd American Edition (Note) p. 612.

††Ranking's Abstract, Am. ed. No. 18, p. 73.

all that need be said on the subject," "*is almost constantly present.*"*

It was doubtless owing to the well known frequency, intensity and periodical character of the headache in malarial fever that induced *Hildenbrand* to consider it diagnostic of this disease.

"The complication of Intermittent Fever with the inflammatory disease, he states, was *proven* by the *violent pain in the head* which *always* returned with the exacerbations and by the eruption around the lips which ordinarily accompanies intermittent fevers and serves to facilitate the diagnosis when it is obscure"†

From our own personal observation, and the result of our researches upon the subject, we have no hesitation in declaring our conviction, that headache is *more constant* in its occurrence, more *intense* in its violence, and partakes more of the periodical character in this affection than in simple or other forms of pneumonia, *malgré* the opinion of our critic, that it has no distinctive value, and is "*common alike* to simple and malarial pneumonia."

We opine that it will put even the ingenuity of our reviewer to the test to reconcile this declaration with his statement that "the paroxysmal and periodical recurrence of the febrile movement is undoubtedly the *leading, distinguishing characteristic* of pneumonia, impressed by a malarious influence." Does not the headache also partake of the paroxysmal and periodical character? Does it not increase and decline with the "febrile movement?" Certainly! Then his unqualified statement, with which he summarily dismisses this symptom, that "headache is common alike to simple and malarial pneumonia," is simply absurd.

Our critic in endeavoring to invalidate the correctness of our delineation of this form of pneumonia, by completely

*Practice of Medicine, vol. 1, 4th ed. p. 308.

†Médecin Pratique, traduit du latin, Par L. P. Auguste Gauthier, D. M. P. Paris, 1824, Tome 2, p. 45.

ignoring the differential value of this symptom, reminds us that in consulting brevity we have not given it that prominency in our Essay to which it was justly entitled. In our article on Remittent fever, however, to which the reader was referred, the cerebro-spinal symptoms resulting from an "inordinate determination to the nervous centres," and their relations to the nature and treatment of that disease were considered at length.

THE BILIOUS SYMPTOMS OF MALARIAL PNEUMONIA.

Whilst considering the name of the disease, we alluded to these symptoms, and indicated not only the objections we entertained to their presence conferring a title upon this malady, but also adverted to the undue prominency assigned them by writers in their portraitures of the affection. As our reviewer and ourself do not materially differ in our views in regard to the import and value of the symptoms, it will not be necessary to dwell upon them, but we shall merely call attention to his following conclusion on this head to which we shall revert hereafter:

"But, notwithstanding all these considerations, persisting nausea, or marked irritability of stomach, bilious vomiting and other evidences of hepatic trouble much oftener present themselves in pneumonia, offering positive proofs of the mingling of a malarious element, than when no such proofs are present; and consequently, when taken in connection with other phenomena should arrest attention as among the corroborative tokens of that special influence."

In our essay in the description of the symptoms, the following remarks occur in this connection: "Nausea and vomiting are very frequent and prominent symptoms, and frequently precede the cough and pain, the fluids ejected being usually of a bilious character," and in the latter progress of the disease, we observed that "the skin and sclerotica assume a jaundiced hue." In considering the "*Diagnosis*" the following reference to these symptoms also occur:

"The evidences of hepatic and gastric disorder have gained for the

malarial form the epithet of "bilious," and although we utterly reject that view of its pathology, which associates either this disease or any form of malarial disease necessarily with hepatic lesion, save as regards the occurence of the latter as a secondary affection of minor importance, yet the frequent presence of nausea and bilious vomiting in several cases, will doubtless afford some aid to diagnosis; those hepatic symptoms dependent on sympathy of contiguity, where the inferior lobe of the right lung is implicated, in pure pneumonia, being of exceptional occurrence."

Before dismissing the subject, however, we cannot, from a sentiment of duty, refrain from adding a few practical observations. In what proportion of cases of this disease, the evidences of disordered hepatic function are absent or present we cannot positively determine, but the daily additions to our experience convince us that they are by no means so universally present as would be inferred from its usual designation, or from the emphasis bestowed upon these symptoms by several authorities. As Drake, though retaining from custom, the name at the head of his chapter on the subject, truly observes the "phrase (Bilious Pneumonitis) does not always indicate a disease attended with bilious symptoms and so far its employment involves a *solecism.*"* So on the other hand Grisolle observes that "nausea and bilious vomiting are not only present, according to J. Frank and Stoll in simple Pneumonia,"† but also observes of this latter disease, "there is no acute disease in which a jaundiced hue of the skin and sclerotica are more frequently observed."‡ Guided by the symptoms of gastric and hepatic disorder, Bouilland contended that one half of the cases observed by him in Paris in 1836, were instances of Bilious Pneumenia, treated according to his usual method of *la saignée coup sur coup*, whilst Grisolle,‖ contesting this statement, unites with Valleix§ in asserting that it is

*Diseases Int. Valley N. America.

†Traité Pratique de la Pneumonie, p. 402,

‡Traité de la Pneumonie, p, 382,

‖Ibid p, 431;

§Guide du Médecin Practicien, 3me ed, Tome premier p, 439.

only in marshy countries that Intermittent and Remittent Pneumonias were observed. Whilst, therefore, we willingly concede that the evidences of prominent hepatic disturbance accruing in a group of cases would yield some aid to discrimination, yet we are as firmly convinced that an opinion should not be based solely on the presence of these symptoms in isolated cases and that very often the diagnosis between this and other forms of pneumonia must be formed altogether without their assistance.

THE PULSE AND FEBRILE ACTION IN MALARIAL PNEUMONIA.

In our further description of the symptoms of this disease, the general character of the pulse and other febrile phenomena, were thus noticed: "The febrile action presents decided peculiarities being *usually* distinctly paroxysmal and remittent. The remissions are, however, *sometimes* obscure, and an active fever exists during the whole of the day and night," and again, after the remarks previously quoted, on the chill in this disease, we added:

"A marked increase of fever follows this insensible chill, which continues to increase in intensity, until an exacerbation, more or less perfect, is developed. The pulse which had been very frequent, and contracted in the chill becomes expanded, acquires force, and sometimes, though rarely, becomes full or tense. The term *compressible* applies to the usual condition of pulse, and the idea entertained on its careful examination is that the heart is acting with only a seeming force, and not with real vigor. In some few cases, the pulse has been observed to be *nearly normal*, or *morbidly slow*."

And in considering the "Diagnosis between Malarial and other forms of Pneumonia," we also stated the usual character of pulse in this affection, as being "frequent, soft, of moderate fullness, compressible and never, or rarely, very full, tense or hard," as in Simple Pneumonia, according to the descriptions of the most distinguished writers on the subjects. As further illustrative of the different states of the pulse and calorific function in these diseases we added:

"Nor is the circulation in simple pneumonia subject to the same diurnal variations. It is true that writers aver that in some cases of the latter form the fever is sometimes evidently remittent, but granting that these cases did not belong to the malarial variety (though we strongly suspect the contrary,) still I think that a *marked paroxysmal character* is *seldom* or *never* observed in the simple form. The regularly recurring cold stage is another guide to discrimination, seldom absent in the malarial affection, whilst in the frank form the skin is uniformly of an elevated temperature in the great proportion of cases, generally being hot and dry at all periods of the day and night, whilst in the exacerbation of the former disease, the heat is more moderate and is subject to a daily decline in the remission which occurs immediately before the reappearance of the chill."

The observations of our reviewer upon this head are in accordance with the spirit which characterizes his production, and as they are not very extended, we copy them in full:

"The *Pulse*.—Dr. Manson states that in "malarial pneumonia," the "term *compressible* applies to the usual character of the pulse," and that it is "frequent, soft, of moderate fullness, and never or rarely very full, tense or hard." "In some few cases, it has been observed to be nearly *normal*, or *morbidly* slow."

In their description of the pulse in acute sthenic pneumonia, authors do not uniformly employ the same language. Thus Dr. *Wood* says it is usually full, strong, and only moderately accelerated, but when very frequent is apt to be smaller and less vigorous. Swett states that it is generally full and soft, and ranges from 90 to 110 in a minute. Andral remarks that it is very variable; but its most usual character is that of being frequent and large. Valleix represents it as generally full, accelerated and slightly compressible. Walsh alleges that unless when very frequent—and it may reach 140 to 160 beats per minute—it is *habitually full and resisting;* is of much greater frequency in the mass of serious and fatal cases than in those of recovery, generally attaining its maximum frequency by the third or fourth day; but he has known pneumonia run its course, both in old persons and young adults, with a pulse never exceeding 60. According to our own observations, the pneumonic pulse is scarcely ever hard and corded as it is in pleurisy, but is generally fuller and softer. The condition of the pulse depends upon the character of the disease—whether this be of sthenic or asthenic type. If malaria complicates a case of the former, it is habitually full and resisting, demanding those repeated bleedings which the older physicians practised previous to administering cinchona. Cleghorn, as we shall presently see,

was a bold bleeder in the epidemic pneumonias which he encountered in the Island of Minorca, and of which he has left us so vivid an account. At the present time, nearly all diseases wear the livery of enervated power, and in various localities far removed from each other, pneumonia, as well as other affections, appears divested to a marked extent, of its former dominant sthenic character. Everywhere this seems to be the prevailing medical constitution of the times, of which the reign of carbuncles, carbuncular boils, whitlows, etc., that for the past few years have prevailed in such unwonted proportion, may be considered, among other evidences, as a striking proof. A recent writer states that he is as cautious in ordering a patient to be bled as a surgeon would be in deciding upon the amputation of a limb; and having been for the last three years connected with a dispensary, where all the usual forms of disease present themselves, he had recommended bleeding only once during the whole of that period in that institution."

"It follows, then, that a soft and compressible pulse cannot be deemed at the present time, at all peculiar to that form of pneumonia which is imbued with the poison of malaria; and in that variety of the disease termed *typhoid*, from the predominance of the asthenic state—it is habitually soft and readily compressible."

Such are the sterile conclusions to which our reviewer arrives in regard to the differential characters of the pulse in Simple, Malarial and Typhoid Pneumonias, and judging from his own declarations, as conveyed in his own language, the reader is left to infer that our observations in regard to the condition of the arterial circulation in these forms of disease had been as well omitted—a conclusion as erroneous as it is barren and unsupported by facts or authorities. Of all diseases classed among the idiopathic inflammations, in which the symptoms of vital re-action are most vigorously and prominently displayed, simple acute pneumonia presents one of the most conspicuous examples. It therefore, has been selected as the field upon which the partizans of the inflammatory theory have long intrenched themselves and, upon which the defenders of the anatomical pathology have deemed themselves impregnable. Dating, therefore, from the earliest records of medicine the phenomena referable to an intense excitement of the heart and arteries have played an important *rôle* in this affection,

and it has been selected as the most appropriate theatre in which to exhibit the triumphs of the lancet and the auxiliary weapons of the anti-phlogistic armament.

With a view, therefore of elucidating the Diagnosis between simple acute primary Pneumonitis, and the malarial and typhoid forms, we quoted the definition of Cullen, as containing a concise description of the characteristics of the pulse in the idiopathic disease, and whose correctness has been sanctioned by the most distinguished successors of that illustrious physician. But in opposition to this, our reviewer alleges that "in their descriptions of the pulse in acute sthenic pneumonia, authors do not uniformly employ the same language," thus implying that there is no generally recognized grade of vascular excitement in that disease, no common standard by which it may be designated or compared with the pulse in other varieties of pneumonia. Let us glance at the teachings of authority on this point, and that we may fairly test the correctness of his declarations, let us first refer to the identical authors cited by our reviewer. We quote them in the same order, and will introduce them in his own words:

1st. "Dr. *Wood* states *it* (the *pulse* in acute sthenic pneumonia) is usually full and strong, and only moderately accelerated, but when it is very frequent is apt to be smaller and less vigorous." As this account is quoted by our critic from his "Prayer Book," and with which he ought therefore to be religiously familiar, we might expect that if Dr. Wood had contributed any light on the diagnostic characters of the pulse in Simple Bilious Pneumonia that it would have been referred to in this connection by our reviewer. But no! with the singular obliviousness with which our reviewer, as we shall see is so often conveniently afflicted he ignores his favorite authority when he throws any real light on the subject at issue, or casts the weight of his evidence in our favor. Let us see what the "Prayer Book" contains in his behalf. After stating that in Bilious Pneumonia the fever "is always remittent," Dr. Wood observes

that "the *grade* of inflammatory *action* is in *general, less elevated* than in *ordinary* pneumonia, and sometimes the fever assumes a typhoid type, the pulse becoming feeble, the tongue brown and dry, and the mind somewhat wandering." The reader will perceive that this passage fully sustains our views of the differential characters of the pulse in the two diseases. Nor can our critic dispute its correctness, for in his array of the "modern standard authorities," he quotes the description of Dr. Wood *in extenso*, from which the latter sentence is extracted and pronounces it to be a "succinct and comprehensive description of bilious or malarial pneumonia," in which "its distinctive features" are portrayed "in his (Wood's) wonted, clear and accurate style," yet, in considering the "distinctive features" of the pulse under its proper head, the "distinctive feature" is entirely unnoticed. Our critic, like many others who ostentatiously parade their "Prayer Books," has received but little benefit from its precepts, at least, on this point.

2nd. Swett.—Our reviewer continues, "Swett states that *it* (the pulse in acute sthenic pneumonia) is generally full and soft, and ranges from 90 to 110 in a minute." This quotation does not give the whole truth, however, for not only does this writer state the febrile re-action in simple pneumonia to be *usually considerable* and *sometimes intense*, but in considering the "treatment," he warmly advocates blood-letting as the "principal remedy," to be succeeded by "Tartar Emetic," thus indicating the grade of arterial excitement to be vigorous and vehement, whilst in his brief notice of "Bilious Pneumonia," which he observes "is sometimes met with, especially in miasmatic regions, the tendency is to a typhoid state," and that "although the pulse may be full and strong" (as we ourselves have stated it to be in rare and exceptional cases) yet he observes that "you must be careful how you bleed patients in this form of the disease, as it is apt to assume, in its progress, a typhoid character." There is, therefore, no real discrepancy be-

tween the views of this writer and our own. On the contrary, the diagnostic value of the pulse in these diseases which we have announced, is fully supported. In the estimation of our critic, they are unworthy of notice.

3rd. Andral.—Our reviewer continues, "Andral remarks that *it* (the pulse in acute sthenic pneumonia) is very variable; but its most usual character is that of its being frequent and large." So far, so good; but this isolated sentence does not give a satisfactory idea of Andral's estimate of the vigor of the circulation in Frank Pneumonia. This eminent writer in continuation of the quotation of our reviewer adds: "When the inflammation is intense it (the pulse) sometimes presents a remarkable smallness which disappears after abundant bleedings;" and again he states, "Sometimes after copious venesection and when every symptom announces that the inflammation has diminished the pulse loses nothing of its strength and hardness, (*de sa force et de sa dureté*) thus clearly implying that these were the pre-existing qualities."* If we follow him to the Treatment, we shall fully understand what must have been the strength of the pulse in the disease as it usually occurred in his practice, for he observes, "That for many centuries observation had led physicians to resort to Blood-letting to a greater extent in this affection than in any other; that the *first bleeding* ought to be carried to the extent of *sixteen ounces*, and even *to twenty;* that if the symptoms should persist we should not hesitate to *re-open the vein*, which might be repeated *two or three times* in the *first twenty-four hours;*" that "on the *succeeding days* the *bleedings* should be *boldly repeated* if the symptoms did not yield, and that even *advanced age* should not prevent the practice of *numerous venesections.*" In addition to these phlebotomies *à la Sangrado* he advised "the application of *leeches*," which should not take the place of the "ouverture de la veine," but "might be made *simultaneously* while the *blood was flow-*

*Clinique Médicale Tome Troisième, 4me, Ed. pp. 504–5.

ing from the vessel," and that "it was *often* necessary to *cover the painful side* with *leeches.*"†

This author gives such a meagre and unsatisfactory account of *Pneumonia Bilieuse* that it may be safely asserted that he possessed no definite information on the subject. The disease as described by Stoll, he rejects as a "*true* inflammation of the lung," and declares that "the pretended pneumonia of the latter was nothing more than a pulmonary catarrh with gastric and intestinal disturbance." The disease as observed by Andral, was evidently, as he himself declares, nothing more than ordinary frank pneumonia with hepatic disorder, which as Grisolle observes, is a frequent attendant on the simple form. Our reader will, however, readily agree with us that Andral's account of the open, well developed and often indomitable arterial re-action in "acute sthenic pneumonia" presents a striking contrast to that observed by any recent author in the malarial form.

4. Valleix.—Our reviewer continues, "Valleix represents *it* (the *pulse* in acute sthenic pneumonia) as generally full and accelerated and slighly compressible." But little information can be gained from this author upon the subject under discussion, but that he considered the grade of vascular excitement to be more elevated in simple than in Malarial Pneumonia, we may cite these facts from his celebrated "*Guide.*"

(*a.*) In his remarks on the "differential diagnosis between Pneumonia and Pleurisy," he states that "the febrile movement is *much more intense* than even in the latter," and again characterizes it as "one of the most *violent* febrile affections."

(*b*) In considering the "Treatment of Bilious Pneumonia," he observes that "Blood-letting should not be so much insisted on in this as in frank, inflammatory pneumonia," and in his observations on the treatment of Intermittent and Remittent Pneumonia which he does not regard as a bilious

†Ibid. 529–31.

pneumonia at all, but which Dr. Howard declares "*is the* disease in question," he does not devise any depletory measure, but simply insists on the employment of quinine.

Whatever importance may, therefore, be attached to the authority of this writer on the subject, it confirms the value and correctness of our views in regard to the diagnostic peculiarities of the pulse in simple and malarial pneumonia. Our critic, on the contrary, deems them altogether unworthy of his "distinguished consideration."

5th and lastly. Walshe.—The character of the pulse in acute sthenic pneumonia, according to this writer, is thus quoted by our reviewer: "Walshe alleges that unless when very frequent—and it may reach 140 or 160 beats per minute—it is *habitually full* and *resisting* is of much greater frequency in the mass of serious and fatal cases than in those of recovery, generally attaining its maximum frequency by the third or fourth day; but he has known pneumonia run its course, both in old persons and young adults, with a pulse never exceeding 60." As the writer declares the pulse in Simple Pneumonia to be "*habitually full* and *resisting*," our views in regard to the grade of the re-action in this variety are sustained by the weight of his authority; but as like many of the "Modern Standard Authorities," he is so little conversant with the Malarial form that it finds no mention in his pages, diagnosis, therefore, receives no further assistance from his treatise.

It will thus be seen, according to the authorities cited by our reviewer himself, that the condition of the circulation in Simple Pneumonia is decidedly phlogistic, whilst in the malarial form when alluded to by them at all, the re-action is of a more subdued character. These views are fully confirmed by others.

M. Grisolle whom, as we have seen, our reviewer terms "the greatest of all modern standard authorities on the subject of pneumonia," in his "Treatise," observes that in "Acute Pneumonia," that "the disturbance of the circulation may be regarded as a constant sympton in pneumonia.

It is revealed by the *acceleration* of the *Pulse* which at the same time increases in *volume* and *force*,"* and in his later work, he declares that the Pulse is accelerated from the commencement and in the majority of cases is full and resisting.† On the other hand, this writer who occupies such an elevated pedestal in the eyes of our critic, declares that in "Bilious Pneumonia, in all of his patients, save one, that the pulse was soft, feeble and compressible."†

M. Bouillaud states that, in "the two first periods of Acute Pneumonia the pulse is generally large, full, tense and frequent."¶

Drake, in the work which our reviewer so justly applauds, but whom we shall see sustains the most important point in our Essay, remarks in his chapter on Bilious or Malarial Pneumonitis, that the signs of an *intense phlogistic action* are *less* conspicuous in that disease than in *ordinary* pneumonitis."

From this examination, it is clearly established that the different conditions of the pulse, as regards its force in Simple and Malarial Pneumonia, were worthy of consideration, and that due attention should be bestowed upon them in framing a diagnosis between those forms of disease.

But there are other characters of the pulse in Malarial Pneumonia which render it distinctive, to which we beg attention, viz: its *diurnal* variations.

Although admitting that the fever in this disease is distinguished by a decided remittent and periodical character, and that it is very generally observed in this form of the disease, yet our critic slurs over our correct and faithful observations on the pulse in this summary manner. "It fol-

*Traité Pratique de la Pneumonie, p. 249, Paris, 1841.

†Traité élémentaire et pratique de Pathologie Interne, 7me ed. Tome. 1, 835, Paris, 1857.

‡Traité de la Pneumonie, p. 404.

¶Dictionnaire de Médecine et de Chirurgie Pratiques (en xv vols.)Tome Treizième, p. 404.

‡Diseases, Interior Valley, N. A. p. 869.

lows then that a soft, compressible pulse cannot be deemed, at the present time, at all peculiar to that form of pneumonia which is imbued by the poison of malaria, and in that variety of the disease termed typhoid, from the predominance of the asthenic state, it is habitually soft and readily compressible."

The candid reader will here readily perceive that our critic not only erroneously and improperly suggests that we have stated a compressible pulse to be peculiar to this disease, but has totally ignored our observations on the diurnal variations of the pulse, which are usually so conspicuously marked, when its conditions, as regards its force, frequency and expansion in the chill, exacerbation and remission are compared; being frequent and small in the chill; acquiring vigor and volume in the exacerbation and diminishing in force, size and number as the fever declined in the remission. Admitting the pulse in Typhoid Pneumonia to be frequent and compressible, for let it be observed that we have not stated a pulse with these characteristics alone to be diagnostic, yet we contend that in the latter, there is not, as in Malarial Pneumonia, the same regular quotidian alteration in its frequency, force and volume. These differences in the character of the pulse, would alone be sufficient as a guide to discrimination as far as the pulse could be deemed diagnostic. We must confess it passeth our simple understanding, how the fever in a disease can be "decidedly remittent and periodical," as admitted by our critic, without the pulse partaking of the same remittent and periodical character. Yet our observations in this regard are esteemed entirely unworthy of notice by our magniloquent critic, and why? Because, forsooth, "in that variety of the disease termed typhoid, from the predominance of the asthenic state, the pulse is habitually soft and readily compressible." How charming is the *naïveté* of our critic! How zealous for truth! how hostile to error! But our reference to the dissimilarities of the pulse in Malarial and Typhoid Pneumonia did not end here, but for

the sake of brevity, we referred the reader to our article on Remittent fever for further information in regard to the peculiarities of the pulse in typhoid fever (which when complicated with inflammation of the lungs constitutes the only form of Typhoid Pneumonia we have ever observed and alone referred to) in which paper will be found this passage: (Transactions Med. Society of N. C. p. 45, 1856.)

"The pulse, though frequent in both diseases, (i. e. Remittent and Typhoid Fevers*) is attended with fluctuations so different from each other in the respective fevers as to present a most invaluable aid in diagnosis. Cullen, Parr, Good and others have declared, that in Continued fever, there are two diurnal exacerbations whilst in Remittent fever there is only *one*. We have often verified the truth of their definition, and we feel assured that in doubtful cases the peculiar character of the fever will be detected by the test. The pulse should be counted at short and regular intervals throughout the day and night. If the case is Continued fever, it will arise and decline twice, the first exacerbation occurring in the morning, and the second in the afternoon. In remittent only one exacerbation will be thus discovered."

Before dismissing the consideration of the febrile action in the forms of pneumonia which we have noticed, we finally invite attention to the most important points connected with the subject.

The remittent and paroxysmal fever in Malaria Pneumonia is *symptomatic* of the presence of the *Malarial element*, a re-action to expel the deleterious agent or influence from the organism, the *engorgement* of *the lung* being *subordinate* to the *malarial affection* and frequently *preceding* the *re-action*. On the other hand as Laennec truly observed of Simple

*Before proceeding further in this discussion, it may be well to state here, in advance of the consideration of the Pathology of Malarial Pneumonia, that we regard that disease as being primarily and essentially a phase of Remittent fever with congestion of the lungs terminating in Inflammation or not. On the other hand, Dr. Howard adopts the doctrine of La Roche and others, that it is a combination of two distinct and different diseases, viz: Simple Acute Pneumonia and Remittent fever, or to use his own words a "*true* Pneumonia complicated by the *accidental* impression of a *malarial* law."

Acute Pneumonia, "the *fever* is really *symptomatic*, that is to say, it is the *effect* of the *Inflammation.* It *rises* and *falls* with the *inflammatory orgasm.*"

In Simple Pneumonia, therefore, *to arrest the inflammation is to arrest the fever.* In Malarial Pneumonia, *to arrest the fever* is to *remove the lesion of the lung*, the *localisation* of the *fever.*

In Simple Pneumonia to *subdue* the *inflammation* is to *restore* the *patient.* In Malarial Pneumonia, the lesion of the lung will not only resist forever the remedies of inflammation, but will often be increased by them.

In Simple Pneumonia, the Antiphlogistic treatment is usually the salvation of the patient. In Malarial Pneumonia, it too often has conducted its subjects to the tomb.

When our critic defiantly inquires then, "Where then is the *necessity*—what valid reasons are there—what good can result from creating it into a separate and distinct variety of pneumonia?" We answer, the *necessity* is the welfare of those who trustingly confide their lives to our care! the *reasons* that danger and death may be averted! the *good* the salvation of our patients and the elevation of our divine art! Is he answered?

The Oil of Turpentine in the Treatment of Neuralgia and Particularly of Sciatica.

Turpentine was employed many ages ago in the treatment of diseases of the nerves. It was used by Galen in the form of a plaster. Sculter exhibited it succesfully in wounds of the nerves; and Bonner had even the good fortune to cure a patient of neuralgia by the essential oil of Turpentine; but Archibald first brought it into notice as a remedy for Sciatica. Having informed Cheyne of the success with which he had employed it in this disease, the latter recommended it to Home, who afterwards published in his "Experiments and Facts," seven cases in confirmation of the practice. Since that period, Turpentine has been employed in the above mentioned diseases by many physicians of different countries.

Little benefit is to be expected from the employment of the Oil of Turpentine without due attention to the mode of administering it. It has been exhibited in various proportions, and in very different ways, but we decidedly prefer giving it internally, and in small doses of twenty drops three times a day, in order that its absorption may be more gradually but thoroughly effected.

In larger doses it is liable to occasion diarrhœa, by which its peculiar properties are rendered unavailing.

The Oil of Turpentine, when thus given in the above doses, and in some proper vehicle, such as honey, syrup, &c., produces a strong sensation of heat in the stomach, and whole intestinal tube, as well as in the diseased nerve and limb, and sometimes, it even occasions a general sweat. In certain individuals, it causes a colic or diarrhœa, and more rarely, either a dysury or an increased flow of urine. But when too large a dose is given intense colic and diarrhœa, and even vomiting supervene. Yet these formidable signs of irritation, both of the digestive and the urinary

organs, generally disappear as soon as the medicine is intermitted. In patients whose stomach and bowels are irritable, a small quantity of opium is found a useful addition to the Turpentine, by moderating its stimulating effects on the mucous membrane of those parts.

When the Oil of Turpentine is administered in the manner and quantity just described, it would seem to be particularly powerful in the removal of Sciatica. Be this as it may, its efficacy is also remarkable for curing other species of neuralgia which affect the extremities.

When we attempt to deduce from the phenomena which follow the exhibition of the oil, the mode of its operation and the cause of its being efficacious, we cannot refer the latter to its purgative, its diuretic, or its sudorific effects: since this augmentation of the different secretions is neither regular nor constant in its occurrence, and never bears any proportion to the benefits derived by the patient. Besides, we daily see patients who are purged, sweated, &c., much more abundantly, by other medicines, without deriving the least benefit; and it was this reflection which led Home to attribute to the Oil of Turpentine a specific influence over Sciatica.

Some physicians have supposed that this medicine produces its sanitary effects on the nervous system by causing a revulsion from the brain to the stomach and skin. Others, on the contrary, attribute its efficacy to a revulsion on the nerves, which is sympathetic with that of the stomach. Others, however, conceive that the stimulation which this oil communicates to the mucous membrane of the stomach is equally produced in the nerves affected, and to a greater or less degree in proportion as they are more or less morbidly affected. Which, in my opinion, serves to explain the fact that this medicine is more efficacious in severe and obstinate cases, than in mild and recent ones of neuralgia. The new modification which is thus effected in the state of the nerve would seem, therefore, to dispose it to resume its natural action, that of health.

The heat which those persons who are either cured or relieved, feel in the affected parts, seems to confirm the explanation adopted. As to the question, whether the Turpentine acts directly on the nerves by absorption, or exerts its influence over them indirectly and sympathetically, we are inclined to adopt the first of these hypotheses; and we found our opinion on the fact that this Oil is nearly always reported to fail in curing those cases of neuralgia where it produces violent purging, which is also true in respect to all other substances employed in this disease, and whose only effect is to irritate the mucous membrane of the stomach and intestines.

Its action on the urinary organs would appear to be seldom useful, but on the contrary, often injurious. This medicine is of efficacy in all cases of neuralgia affecting the extremities, and particularly in Sciatica, when this disease is simple in its character and evinces no sign that the nerve is either altered in its structure, in a state of inflammation or compressed by the formation of a contiguous tumor.

The chance of cure by this medicine is greatest, when the pain is so intense as to indicate distinctly the course of the nerve, and so obstinate in its nature as to yield to no other treatment whatever.

TEREBINTH.

UNIVERSITY MEDICAL COLLEGE, N. Y.

Interesting Case of Exhumation after Four Years Death.

Having attended my first course of lectures, and returned home to spend the summer months, I wished to obtain some bones that I might the more profitably study osteology. With this view, I proceeded to disinter a body which had been buried four years, expecting, of course, to find nothing but the skeleton; but to my astonishment, the following phenomena presented themselves. It was night, and having opened the grave, I attempted to lift out the body, but found it much too heavy for one man. Having procured help, I removed it to a convenient place, and found the extremities mouldering and ready to drop off. The trunk and viscera, however, were in a remarkable state of preservation. The thighs also were comparatively sound and on cutting into them a red serous fluid exuded, much resembling the serum of the blood. The muscles were well marked and the blood vessels could be distinctly traced. The intestines appeared to be almost perfectly sound, and the omentum contained a large quantity of yellow fat. The right lung was in a normal condition, and the air cells could be as well seen as in the recent subject; the left, however, was very much softened and disintegrated, bearing the impression that it must have been diseased before death. The heart was perfect in all its parts, and the muscular fibres could be stripped off like boiled beef. Surrounding it was a layer of yellow adipose matter, about half an inch in thickness, but I could discover none in the muscular tissue. The liver presented itself about the size of an orange and could hardly be distinguished. The kidneys were absent, or at least, I could not find them: the bladder, however, was sound and distended with gas. The rectum was filled with soft fœces which had apparently undergone no change. On opening

the skull, I found the brain reduced to a fluid state and not filling more than one-fourth the original cavity, and smelling very much like spoiled fish. The whole back of the neck was converted into what is termed adipocire. But the most curious phenomenon connected with the whole was the peritoneum. This membrane was completely detached from the abdominal parietes, and but loosely invested the viscera. It was almost complete, and could be removed in flakes several inches square. The body had but a faintly disagreeable smell, and on burning the flesh, it emitted the agreeable odor of broiled ham. Some of the bones were completely rotten and would tear out with the attachments of ligaments and tendons. The frontal suture was perfect, though the man was fifty years old when he died.

Now the questions are, what caused this remarkable preservation, and especially, why were the internal organs preserved, and the extremities decayed? There was nothing peculiar in the earth to act as an antiseptic. Why did the brain emit that peculiar fishy odor? Why was the nape of the neck changed into adipocire? I leave the last two questions to the profession; but the general history of the man will perhaps give an insight into the cause of preservation. I knew the character well: he was subject to no special disease but was an habitual drunkard from early youth. And in one of these drunken broils received a blow which caused his death. Now, was it the alcohol that prevented decay? Undoubtedly it must have been. But why the viscera and not the extremities preserved? Perhaps from this cause, viz: Exclusion from the atmosphere, and a more direct saturation with the alcohol.

I do not propose this as something new, but to an amateur it becomes a series of interesting facts.

I have the honor of submitting myself a student of medicine in the University of N. Y.

NEEDHAM B. HERRING, of N. C.

Explosive Oxide of Silver.

The attention of the profession was called in the Jour. Phar., Sept. 1858, to the "incompatibility of oxide of silver with grape sugar." My attention having also been called to it by a friend, I have made some experiments which I will submit.

Exp. 1st. I made into a pill, a few grains of oxide silver, with honey and quinine; the pill remains unchanged, as far as external appearances indicate; no cracking or charring of the box being noticed. This specimen of Arg. Ox. was procured from a reliable chemist in Philada.

Exp. 2nd. I precipitated from a solution of Argent. Nit., with Ammonia, Arg. O. and made one pill as above. I am confident that the reason fulminating Argt. Ox. was not formed, was that the Ammonia was not sufficiently strong, and did not remain in contact with the oxide long enough. The pill made from this specimen, like the first remains yet unchanged.

Exp. 3rd. With the above specimen of Argt. Ox. I made a third pill with Extract Gentian, it also remains unchanged.

Though these experiments themselves may not explain the singular explosion of pills of Oxide of Silver, noticed by so many, yet with the authorities before us, the reason is evident.

Graham says, "*fulminating silver* is a substance of a dangerous character, from the violence with which it explodes. It often explodes with unequalled violence when pressed by the hand, and it is stated on reliable authority that when dry it explodes by the touch of a feather."

*Dr. Davis noticed in his lectures, the peculiar phenomenon of which I have spoken, and thought that it was owing to the reaction between the oxide and honey.

*Dr. Davis, Prof. Anat, and Mat. Med. University of Va.

The Dublin and Edinburgh Colleges order Lime Water as the precipitant; and the U. S. Ph. orders Liquor Potassæ. Pareira tells us that N. H.$_3$ must not be substituted for a fixed alkali both for the reason that an excess of the precipitant dissolves the oxide, and the danger of forming *fulminating silver*.* Dr. Butler Lane also tells us that pills made of Argt. Ox. prepared in this objectionable manner, spontaneous combustion is apt to ensue.

Hence, I consider it quite well established, that the change which pills of Oxide of Silver undergo, is due, not to any re-action between the grape sugar, the extract Gentian or mucilage, but to the spurious article found in commerce.

The facility of its preparation and the infrequency of its use as a remedy, it would be well that the physician or pharmaceutist prepare the oxide for his own use.

STUDENT.

Wilmington, Jan, 11th, 1860.

*Parerira's Mat. Med. vol. i. 3d Am. ed. p. 832.

SELECTIONS.

Practice of Medicine.

Enteric Fever.

BY JOHN RICHARD WARDELL, M. D. ED. M.R.C.P.

The subject of continued fever is one which in recent years has had bestowed upon it much patient and careful observation. The four varieties, viz: typhus, enteric, relapsing, and febricula—were formerly regarded under the first appellation as a generic term, and the differences which are now accounted distinct characterictics were not acknowledged. The doctrine of their identity was not doubted,and it has only been from data deduced from a very large number of cases that the questions of their etiology and pathology have been placed beyond the pale of dispute. It is very important that the views which have by so much labor been eliminated should be broadly known,because a right interpretration of the symptoms peculiar to each kind often involves weighty consequences, not only in the treatment, but in the prevention of their diffusion. Hospital physicians, and those practising in urban communities, where fevers are more rife, can at once recognise the particular species; but it must be confessed that there are those in the profession whose opportunities are less ample, and who from time to time experience some difficulty touching many points associated with continued fever. With regard to the essential nature of the first three forms enumerated above, there is now no longer any doubt that they are as specifically different as are smallpox, measles and scarlet fever. To this way of thinking I did not subscribe when, in 1846-7, I published a series of

papers in the *Medical Gazette*, founded on copious notes taken at the bed-side of more than 1200 cases of fever in the hospital at Edinburgh, for the establishment of the fact of the non-identity of, and other cousiderations connected with, typhus and relapsing fever. I then believed the enteric (typhoid) and typhus to be the same. Dr. Jenner's able monograph proved them to be dissimilar, and, too, that the enteric and relasping differ. The following is an example of the enteric form, condensed from the more extended report in my case-book, and I shall endeavor briefly to observe how its description tallies or disagrees with the other two named varieties.

On the 21st of June I was requested to see E. S. a girl, nine years of age, who was reported to be ill with fever. On the 12th she had had shivering and other initiatory symptoms. Her bowels not having been moved for three days, a mild aperient and an enema were ordered. The febrile expression was marked; in the night she had been delirious, and repeatedly endeavored to get out of bed. The eyes were suffused, the pupils dilated, and there was an exceeding deafness; she was, however, quite sensible, and correctly answered questions. Lips dry; tongue moist, centre covered with a yellowish-white fur, tip and edges preternaturally red. No affection of fauces; no pain at epigastrium. Abdomen somewhat tympanitic, and a gentle pressure at the iliac fossa gave the transient expression of pain. No gurgling. Ausculation discovered no signs worthy of note, nor was there any dullness over any part of the thorax. Pulse 132, weak; respiration accelerated. On a cursory review of the case, it was evidently one of enteric fever. The small, circular, rose-colored spots, acknowledged as the distinguishing diagnostic marks of that disease, could not now, after a very careful examination, nor at any subsequent date of the illness, be discovered. The head was shaved, cold applied, and wine, beef-tea, and a diaphoretic mixture were ordered.

June 23rd.—A feculent stool followed the third dose of a rhubarb mixture. Tympanitis increased; pulse 130.

24th.—She tried to get out of bed during the night. Eyes suffused; pulse 138, but of a larger volume; tongue moist and almost clean.

27th.—She is not so deaf; pulse 120; belly still resonant, and feels dry and harsh.

For some days afterwards the report of the case presents no facts worthy of relation. She slept better; tongue and lips were moist and clean; she was quite collected whenever I saw her; and the bowels were moved once a day, either spontaneously or by enemata. The urine from the first had been voided in normal quantity. Two small ash-colored patches appeared on the mucous membrane of the upper and under lips, which readily disappeared after being touched with a piece of alum.

On July 9th, the pulse counted the lowest to which it ever fell, 116; and I hoped she was now in a fair way of recovery, although she was by no means in the apyrexial condition.

On the morning of the 12th, there was an increase in the febrile expression; the skin was hot and dry; the abdomen more distended; pulse 134.

17th.—The pulse had risen to 140, small and compressible; very deaf; tongue and lips moist and clean. Wine, during the last four days, had been increased.

18th.—Much worse; lay on her back, and down in bed with knees up; considerable tympanitis; tongue moist and clean; eyes blanched, and the features had begun to sharpen. At intervals complained of pain in the abdomen. Quite sensible and answered questions correctly. A mixture, with chloric ether, ammonia, and camphor, was prescribed, and wine and beef-tea given every hour. Pulse 144, small and thready.

19th.—Pulse 140; tongue moist; enema produced a dark feculent dejection; urine passed normally. From this time she obstinately refused to take anything except cold

water. The heart's action became more and more feeble, systolic sound brief and sharp, the face more pinched, the skin cold and clammy, until she died, in the evening of the 24th, the forty-third day after the rigors, headache and general indisposition had come on. During the last five or six days of her life there were, daily, sickness and vomiting. The pain in the abdomen was not so marked at the close as to make me suspect perforation. She sank from asthenia. There had never been the least tendency to diarrhœa, nor any loss of blood per anum. Until within a few hours of her decease she was rational; and up to the last twenty-four hours she could partially turn on the side. There was no smell of putridity, no sore or excoriation on any part of the skin, no subsultus, no picking at the bed-clothes, and the sphincters retained their functions almost to the close.

I did not press for a post-mortem examination, because is was so evident that the chief lesions would be the ordinarily-seen ulceration of Peyer's patches, and because that morbid appearance in this form of fever has so recently been ably and in full detail described by Dr. Tweedie, who, in his clear and comprehensive Lumleian Lectures, has illustrated this pathological condition.

After a series of questions put to the mother relative to the mode of invasion, the particulars elicited were not so pathognomonic of the enteric as occurs more frequently. It begins more insidiously than typhus, and much more so than the relapsing. In the latter the attack is sometimes quite sudden; a person may go to bed comparatively well, and in the morning be seized with shivering, headache, pains in the limbs, and other symptoms. There is less dullness and stupidness in the enteric than in typhus, in which the great nervous centres seem prone to be more readily impressed, as if the poison at once affected animal life. It is quite true, however, that all forms of continued fever in the symptomatology of accession present much in common, and under an experienced eye, it is often difficult during

the first few days, or even until the rash appears, to arrive at a decided diagnosis. In typhus, the muscular system evinces great prostration, not only at the first, but throughout the disease; as a rule, the patient lies helplessly on his back. In the instance given, she could turn herself in bed, and lie on the side up to a short time previous to dissolution. Again, the intellectual faculties were comparatively little disordered. During the night there was some wandering delirium, as evinced by repeated efforts to get out of bed; but in the daytime she was up to the last quite rational. The moment I entered the room she always recognized me, and, when she could be made to hear, correctly answered questions. The deafness came on early and it varied much; some days she was very deaf, on others slightly so. This symptom is common to both typhus and enteric, and regarded alone, it does not importantly affect the prognosis. Dr. Jenner has noticed that in the enteric type patients have a greater tendency to "get out of bed" than in typhus; the delirium is of a more vivacious kind; they are less easily restrained. In many cases the delirium does not come on until the second or third week; when it does in the first week, it is to be looked upon unfavorably. In typhus, it supervenes before the end of the first week, when it increases, and in fatal cases ends in coma. In relapsing fever there is comparatively little delirium and head complication. On reference to my own account of that disease, in one table giving particulars of 450 cases, leeches were applied to the head, on the average, to 1 in 6-62; in another set of 80 cases it was a predominating symptom in the small proportion of 1 in 11-42. According to Louis, the brain and its membranes of those dying of the enteric rarely present any such marked appearance as might be deemed of potential consequence entering into the causation of death. To those who have had considerable experience in morbid anatomy, it is well known that the encephalic mass gives little explanation of the essential nature of continued fevers. A small amount

of sub-arachnoid and ventricular effusion, a pinkish blush of the cortical substance, or it may be a few puncta in the centrum ovale, constitute often the entirety of morbid phenomena, and I have repeatedly examined this organ when it evinced no lesion. Even coma may not be traced after death. There is no doubt that the views enunciated by the late Dr. Clutterbuck and those professing similar opinions—regarding fever to consist of inflammation of the brain—led to much mischief in practice, and that a more correct pathology (which is, it cannot be denied, an approach to the once widely received and then discarded humoral doctrine)has been succeeded by a more successful mode of treatment—viz., that treatment which as far as possible dispenses with depletive measures, which is more expectant and conservative in its aims, and which, by having a just relation to a set of morbid actions not primarily located in any single organ or separate tissue, but pervading the entire organism, opposes asthenia. The late Dr. Allison, whose clinical assistant I was, and whose practice I carefully observed, used to dwell with much emphasis upon the Cullenian maxim of "averting the tendency to death;" and although he did not carry the wine and brandy remedy to the extreme which by some it has latterly been advocated, yet he had long seen, with much sagacity, that acute diseases, and more especially fevers, had, from some subtle and inexplicable cause, become less sthenic in their nature, demanding remedies which in previous years were accounted inapplicable or decidedly prejudicial.

Those organs and surfaces which are of an eliminative, a depurative, or defecating character—those emunctories and outlets whereby the products of organic waste and effete matters are carried off, are precisely those which are most liable to become affected in the progress of fever. That poison which by a most rapid multiple has so vastly increased as to contaminate the whole of the circulating fluid, in obedience to certain vital laws inherent in the organism, by such channels becomes expelled; hence, ac-

cording to the power of such agent, the excess or defect of function of such organs and surfaces; and thus it is that the skin, the mucous membranes, and the parenchyma of secernent viscera more especially manifest the effects of the specific poison. Ancient theory and every-day facts convince us of those conservative qualities which the system possesses, whereby it essays to eject what it cannot assimilate, and to get rid of such noxious matter as it may have contracted. In the exanthemata, the skin and the mucous membranes of the air-passages are the chief seats of its determinations; in enteric fever, the pustulation is in the digestive tube, mainly in the ileum; in typhus, the mulberry rash evinces an effort made at the superficies to throw off the poison; and in relapsing fever, the powerful diaphoresis, which so frequently at once resolves the fever, inculcates the same doctrine. It now being conceded that the three eruptions peculiar to the respective types of continued fever, are as pathognomonic of those varieties as are the eruptions in the exanthemata, properly so called, it would really seem that it is merely an arbitrary distinction on the part of systematizers and compilers of nosology, whereby they are differently arranged. They all have many features in common; they all originate from peculiar morbid poisons, requiring a greater or less period of incubation; they all pass through a certain train of febrile phenomena; and in all the great centres of animal and organic life, are in varied degree affected. Again, there are many points of resemblance in the complications which arise, in the demand of treatment, in the sequelæ, and in the phenomena of the fatal issue.

If we were to make a hasty comparison between small-pox and spotted typhus, how many characteristics they manifest of a like nature, still unquestionably caused by poisons, with which like only produces like. Both originate from peculiar poisons, are contagious, require a certain period for devolopment, are diseases in which the prime agent specially operates upon and multiplies in the blood;

in one the eruption may be looked for on the third, in the other on the sixth day; in both are all the pyrexial symptoms, as a quick circulation, high temperature, furred tongue, anorexia, diminished secretions, and a great impress is made on the nervous system; in each organic complications of the inflammatory kind may arise; there is delirium and often coma. In the one form, death mostly takes place on or about the eleventh day; in the other, rarely till after the twentieth; and both may have sequelæ attacking the same organs and tissues. And similar comparisons might be drawn between two types taken from continued fevers and the exanthems. Although human reasoning cannot say why it is that in one variety the pustulation is in the intestines, in another in the skin, yet accumulated observations have long shown that between the skin and the mucous membrane of the digestive tract, there is a peculiar sympathy, and that between the enteric and variolous phenomena many of the fundamental symptoms exemplifying no slight or casual features of resemblance.

Dr. Kennedy, of Dublin, in a paper read before the Medical and Chirurgical Society, propounds the doctrine that typhus and typhoid (enteric) are mere varieties originating from the same poison. Of relapsing and typhus I can speak with much certainty. Sixteen years ago I maintained from very elaborate data their distinct essence, and such doctrine still holds good. In more than 1200 cases I never saw typhus and relapsing blended. The infection caught from one fever never produced the other. Like always produced like in a multitude of instances. I have given in my papers thirty-two cases, in which the two forms succeeded each other within a short space of time. Seventeen out of the thirty-two who had passed through the relapsing, contracted typhus during convalescence, or within the brief period of three months. The proofs of the non-identity of their essential cause were as clear as the common-sense proofs we have, and as practice ever tells us, of the non-

identity of small-pox and scarlet fever. If typhus differs from the relapsing, why may it not differ from the enteric.

With regard to the moisture and cleanness of the tongue, as reported, Louis notices the same. In the 40 cases which he gives, in one-half it remained moist. In typhus, it sooner becomes brown and dry, and sordes are common. In the relapsing, it is much furred, but moist. There was tympanitis at my first visit. This symptom is, of course, from gas in the colon; and when liquid is there also, gurgling is heard. The absence of diarrhœa is well nigh always present. It occurred in 37 out of the 49 cases of Louis; and Drs. Tweedie, Jenner, and Wilkes regard its presence as the rule. In typhus, meteorismus and diarrhœa are rare; the belly is generally flattened or drawn in; and harass of the bowels is not spontaneous, but an incidental and seldom-observed circumstance. In the relapsing fever, in 450 cases I found diarrhœa to average 1 in 6.25: but 1 in 1.65 or 10 out of every 16, had urgent nausea or vomiting. When vomiting comes on in the latter part of enteric fever, ulceration of, or a changed condition in, the mucous membrane of the stomach may be suspected. According to Carpenter and other advanced physiologists, the intestinal glands are outlets for the impurities of the blood. If such be the fact, the proneness of the agminate glands to disease in the enteric form can better be accounted for. Rokitansky gives an elaborate account of the pathological changes undergone by these organs in the fever considered. He says there are four stages—one of blood stasis or congestion, a second of typhous process (infiltration of deposit), a third of softening, and a fourth of ulceration. The lower third of the ileum, and around the cæcal valve, are the parts most affected. I remember making many examinations of the digestive tube of patients dying in fever when I was assistant in the pathological theatre at Edinburgh, and such was the fact. These were then regarded as illustrations of *typhus*, the difference between it and the enteric not having then been demonstrated. I never saw ulceration in the

intestines of those who died from the relapsing. So long as the typhous dyscrasia continues, thus long will the disease of these glands be maintained. The diarrhœa which ushers in the close of phthisis is accompanied by ulceration of Peyer's patches. I was much struck with the general resemblance of this patient to the appearance of those dying in phthisis. A casual observer might almost have mistaken her affection for that complaint. It is seen that the pulse never fell to the non-febrile standard. From first to last, the skin was never moist, but of dry, harsh feel, and of exalted temperature. The pulse was one day 116; it varied, seldom being exactly the same on consecutive days. Irregularity of the pulse is pathognomonic of the enteric. In typhus, when the pulse reaches 130, the case is generally fatal. In relapsing the pulse might be exceedingly high without indicating danger. The death of E. G—— occurred at a protracted period—the forty-third day. Of twenty-five fatal cases given by Dr. Jenner of typhus, nine died on or before the fifteenth day—not one after the twenty-second. The same authority gives the twenty-second as the day mostly fatal in typhoid (enteric,) and the fourteenth as mostly fatal in typhus. In idiopathic peritonitis the intellectual faculties keep unclouded almost to the last. The great sympathetics are potently affected, and the proximate cause of death is increasing debility of the central organs of circulation. The fatal phenomena are exerted on the action of the heart. In the enteric fever, the decrease of power in that organ demands watchful attention; the patient sinks from asthenia—hence the imperative need of stimulants.

Some writers on fever have latterly maintained, after much labor touching the etiology of continued fevers, that the enteric is always very intimately associated with some local cause. I do not, however, here enter into that vexed question as to whether malaria can or cannot of *itself* constitute a sufficient cause. I doubt that doctrine. Nor do I agree with Dr. Budd, of Clifton, that the germs of the enteric are

always conveyed by the drains. I may here hastily mention that a nightman of this place informed me he had been sixteen years thus occupied, yet never had fever. Again, he added that he could instance names of a dozen other men who for long periods had thus been employed, but he never knew one to have fever. No one, however, can gainsay the fact of bad drainage being one main element entering into the causation of fevers. The family of the deceased, whose case I have related, came to reside at Tunbridge Wells, six weeks, prior to her attack. The cottage in which they live is one of a row of new, well-built houses, thoroughly ventilated, and situated in an airy, open, dry, well-drained street. The rents vary from £11 to £12, and none of the occupants can be classed with the poor. I was astonished to hear of the many cases of fever which from time to time had occurred in these houses, and felt certain of some local cause. I found that at No. 1 a family had resided five years, and four of the inmates had fever. At No. 2 there had been six fever illnesses in nine years. At No. 3, the husband had fever some few years ago. At No. 4, where the deceased died, a young man was very dangerously ill of the same disease three years since. At No. 5, a girl had had fever, and it was reported their predecessors had it. At No. 6 I could hear of no case. At No. 7, two years ago a girl of sixteen and a boy of twelve, had "low fever;" and, within a few months, a woman of twenty-six had "typhoid fever." I was told it had often been remarked that "fresh comers" took fever. Behind the buildings are several strips of garden ground, and in each a privy. From the privies runs a deep drain, through a sandy shale; and within a few feet of this drain is the pump-well. The well-water had long been complained of, and, after heavy rains, it was said to have a bad taste. The town surveyor, who made an inspection, told me he believed it very probable that the matter from the drains might percolate into the well. He recommended the well to be filled up. In the next set of premises is another well, supplying two other houses. I made inquiries, but could not learn of

any inmate ever having fever in these two dwellings; but they always used water from their own pump, and never from the pump common to the seven houses. The chief cause of the diffusion of typhus is destitution; for proof of which I would refer the reader to the records of Scotch and Irish epidemics. In relapsing fever, of 436 cases, 81 were in partial work, and 301 were destitute. The relapsing fever cases at Edinburg and other large towns in Scotland, were in a less relative proportion in the ground-floor houses, whose occupiers were mostly little traders, and in comparatively better circumstances, though, of course nearer the drains than those above them; but in the upper flats there was by far more poverty, and, consequently, far more fever.—*London Lancet.*

Diphtheria, and its Treatment.

BY R. R. LIVINGSTON, M. D.

Of Plattsmouth, Nebraska Territory

Diptheria is by no means a new disease, as many are in the habit of styling it, for the curious in medical literature will find it described in writings dated as far back as the sixteenth century; and the probabilities of its existence long prior to that time, are certainly very strong. Owing, however, to the imperfect knowledge of pathological anatomy among the earlier writers, its anatomical characters were but imperfectly described: while it suffered, at their hands, the fate of being confounded with other diseases of the same class. Indeed, among our own writers this confusion obtains to a very considerable extent, as sundry discussions, on this subject, before some of our academies of medicine amply testify—where Professors and others who are looked

up to as the great lights of our science, have followed almost in the very footprints of the earlier teachers in medicine.

There is no denying the fact that this disease has been forced into a scientific alliance with *Cynanche Trachealis*, and while I strongly doubt the propriety of this confusion, I readily admit, that so truly difficult is a correct diagnosis in numerous cases—one that can authoritatively indicate a marked and unmistakeable difference between the two diseases—that many, myself among the number, have sometimes fallen into the fatal error of assuming one for the other. The only consolation I have found, when too late to remedy the error, was, that I was not alone in the false treatment, assumed as the best. In truth, the mortality of diphtheria is not so much owing to its fatal and death-dooming character *per se*, as it is to the too frequent employment of debilitating remedies based upon an incorrect rendering of the complicated symptoms offered for inspection. I feel that in advancing this assertion, I am venturing on dangerous ground; but I fear that if I have been bold, not a few of the Profession will admit that it has been on the side of truth,

Guersent, Bretonneau, Laennec, Cullen, and a host of high authorities have noticed this form of angina, but as at the present day, it has been considered as merely a more malignant type of another disease. Under the terms *cynanche maligna—plastic pharyngitis—diphtheritica maligna—angine gangreneuse—diphtherie—angine couenneuse—ulcerated sore throat—putrid sore throat—black tongue*, &c,, it has been known, and described, in part, but nearly, if not always, in connexion, as above stated. Medical works on anginose affections are certainly numerous enough, but notwithstanding this, there seems to be a desire among practitioners to-day for more, if not better, information on the subject. My experience has led me to arrange all the cases of diphtheria which I have treated or witnessed, under two heads, viz. *Sthenic* and *Asthenic*. This is a simple classifi-

cation, and yet I have found it comprehensive enough to embrace every variety which has fallen under my notice.

In the *Sthenic* form there are no *premonitory* symptoms, or if they exist, they are always of very short duration; and this might in many instances be held true of the stage of *invasion*, for there are cases in which the affection steps, as it were, at once into the arena, in all its force and violence. More commonly, however, the invasion is marked by rigors and flushes of heat, following each other in quick succession, until the whole surface of the body becomes intensely hot, and the fever is fully developed. The first alarm may be a cough, or not; the pulse is full, vigorous, and hard, sometimes irregular; the tongue retracted, coated little or much, with clear red tip and edges; the fauces, tonsils, velum palati, and the lateral arches are generally red and inflamed; the uvula elongated at times, so as to cause a suffocative cough; not unfrequently one or more white spots will be discovered on the tonsils—frequently not; the eyes are usually sensitive to the light, suffused and brilliant; the bowels torpid; the urine small in quantity, and high-colored; albuminuria is not always present; the brain is unimpaired, and the whole train gives evidence of vascular irritation, with increased action. In the formidable varieties of this type, encephalic disturbance supervenes before the pseudo-membranous exudation is formed, and coma, convulsions, and death ensue; or the vital energies are prostrated, and the patient sinks rapidly into the typhoid condition. In this variety the invasion is sudden, the disease attacking the subject while in the full enjoyment of health, and for the most part selecting for its victims the plethoric and robust.

In the *Asthenic* form, the stage of invasion is always preceded by those peculiar premonitory signs which characterize this type of disease, viz. lassitude and weariness, occasionally diversified with a temporary rallying of the genal powers; loss of appetite; pale and dejected countenance; eyes dull and lustreless; there may be some complaint of

soreness in the throat towards evening, and a cough may be present, but the efforts of coughing will be accompanied by all the phenomena indicating pain in the region of the throat; not unfrequently there is little or no complaint of soreness, until the stage of invasion sets in, and terminates this general feeling of malaise, by the usual chills and hot flushes running on, until pyrexia is established, generally in from five to twelve hours. There is then increased action, constituting the stage of excitement, but this speedily subsides, and the typhoid character of the malady is evident from the nervous disturbance. Remissions sometime takes place towards morning, but our guide must be the irritation with *decreased power of acting*, the vital forces seeming to fail from day to day; and then we will hardly fail of recognising the adynamic tendency of the subject. The local symptoms in this form are not always alike; one or both tonsils may be marked with white or greyish spots, surrounded by inflamed edges; there may or may not be a ropy mucous in the mouth, hanging like a film from the roof of the mouth to the tongue when examined; more often there is a considerable fetor of the breath; the efforts to swallow are painful; the glands of the neck, more particularly the submaxillary and parotid, will be swollen, and hard and painful to the touch; the fauces will be inflamed, and the appearance of the throat generally gives evidence of inflammatory action. Uusually there will be found in some, or all of its parts, patches of concrete exudation and streaks of the same, surrounded with the usual red edges; the pulse is rapid, weak and irregular; and occasionally there is an exanthem over portions of the body. As the disease advances, the prostration increases, the pseudo-membrane may extend, and give a croupal form to the disease, and death may result from asphyxia; or the exudation may be so slight as not to embarrass the respiratory organs at all, and yet the patient may sink into a hopeless coma, and death terminate the scene.

Both these forms of attack are subject to modifications,

and I have witnessed cases in which there was no febrile reaction at all, the system remaining oppressed throughout the whole disease; the vital energies being literally overwhelmed from the first moment of attack, sinking the patient steadily until vital action ceased altogether.

It has been from a careful observance of the foregoing constitutional as well as local symptoms, that I have based a treatment upon the "*febrile character*" of this disease, and assumed a division, which in practice has resulted as favorably as I could have desired. The "initial treatment," if you will grant me the expression, is of the very utmost importance toward a favorable termination, and should ever be the result of a careful discrimination between the two forms of attack I have so hastily sketched. It is when first called to the bedside of a patient suffering from diphtheria that we are most apt to make a *faux-pas*, and not unfrequently, too, an irretrievable one, for the case which demands sustaining treatment will scarcely admit of any debilitating measures, and *vice versâ*.

In the treatment of the sthenic form of diphtheria constitutional as well as topical remedies are of the utmost importance. There are three principal indications to fulfil; 1st, to reduce the momentum of the circulation; 2d, to remove any acrid or irritant matter which may produce undue excitement; 3d, to restore the secretions of the liver, kidneys, and skin.

The first indications can very readily be accomplished by a careful administration of Norwood's fluid extract of veratrum viride—never pushing the doses to emesis—or the use of the lancet in a bold manner at the first bleeding, always opening a large orifice, and obtaining a full stream; frequent abstractions of blood are to be deprecated. The second is obtained by the use of sulphate of magnesia combined with minute doses of antim. tart, or the citrate alone, or jalap and pot. bitart. To restore the secretions the cautious use of calomel combined with ipecac, the warm bath, and spts. ether. nit., will answer every purpose. The topical treatment consists

for the most part of insufflations of powdered burnt alum, and the removal by any means of the pseudo-membranous exudation, if it exists. Touching the patches with muriatic acid has sometimes proved highly satisfactory; but I never make use of gargles unless the mucous membrane of the throat is extensively implicated, and then I use a strong solution of argent. nit.

Let me here urge the imperative duty of the physician to watch the disease constantly, for the whole character of the malady may suddenly change to a typhoid of a low and dangerous form; and the patient may sustain irreparable injury from the hands of some kind-hearted nurse, in whose care are the remedies adapted to the inflammatory stage. Warning and frequent visits can alone avert a mistake at this period, for it is now that the real skill in medication is demanded, and upon a correct appreciation of the symptoms the life of the patient depends. If with the subsidence of the sthenic type of the disease, there appears a typhoid tendency, with prostration, we should not hesitate to sustain the patient; although the pulse be rapid, its volume will be found far below its standard, and unless prompt and efficient aid is afforded nature will sink and the patient die. Tonics are sometimes inefficient to answer the end, and I have had to resort to stimulants. Madeira wine I have found the best. Of the tonics, muriated tinct. of iron and bark, or its alkaloid, the sulphate of quinia, are the best; strychnia and iron also form an efficient and powerful tonic. If we follow the general rules of practice in the case of a typhoid patient, our success will be insured.

In the asthenic form of diphtheria the general rules of treatment will be based upon the stage in which the patient is found. If called during the premonitory stage, which is almost always of considerable duration, arouse the secretory powers of the principal organs by the use of the usual means; and if possible, to secure healthy secretions before the accession of the stage of excitement, use quinine and iron as a prophylactic, and introduce chlorate of potassa

into the system freely to disinfect the blood, for I regard diphtheria as essentially a blood-poisoning as our most malignant typhus. In the stage of excitement, moderate the force of the circulation, but be carefnl not to destroy the tone of the stomach Keep it intact, if possible, for with the first signs of nausea the disease resumes a more dangerous character. The septic tendency will indicate the free employment of disinfectants, as chloride of lime, in the apartment where the patient lies. The clothes must be frequently changed; the bath, warm or tepid, according to the condition of the heat of the body, should be employed occasionally to restore the function of that important organ, the skin, and also for the sake of healthful cleanliness; pure air is all-important. When the pyrexia ceases, and the work of prostration begins, meet the indications with stimulants or tonics as the case may require.

Of course the local difficulties of the throat will need early and assiduous attention. Insufflations of powdered burnt alum, every one, two, or three hours according to the urgency of the case, and the steady and frequent removal of all appearances of plastic exudations, whenever it forms, so as to give the alum a fair opportunity of reaching the seat of disease, I have found usually sufficient. Touching the spots with nitrate of silver was a favorite plan with me, but I have abandoned it for the use of alum. I am convinced of the great and paramount importance of the frequent use of these insufflations, in cases where the membranous deposits form rapidly, from experience. If the larynx becomes involved the danger is increased an hundredfold, and *it must be prevented* by this treatment; even this, however, will fail sometimes, and then the method of producing a separation and expulsion, by the use of emetics, as practised in croup, comes foremost to the mind; but I never practise it; fear of disturbing the stomach prevents me. Instead of emetics I use a feather, or other convenient instrument, wherewith to procure such titillation of the fauces as will cause coughing, and the same expulsive efforts as ensue from emesis, without

its debilitating effects. But this too will fail, and asphyxia seems imminent. What then should be done? Would any sane practitioner hesitate to announce to the relatives and friends of the patient, the importance of the sole remedy left? I grant that this is a fearful ordeal for the physician as well as the patient, but I would not deny them the only resource which remains when this moment arrives. Tracheotomy is the *dernier resort*, and let it be done, hopefully and with confidence; but do not delay until the membranous deposit lines the bronchi. The exact moment of election must be left to the discretion of the attending physician, but I would advise that it be done early. Twice in my practice I have performed it, once only successfully; but I think that the first case was operated on too late.

Convalescence from diphtheria is fraught with danger, and requires the enforcement of all the attendant's orders; it is tardy, occupying not weeks but months, and throughout the sustaining treatment must be followed.

Finally, let me say, I believe this affection to be *contagious*. I think that I am safe in asserting that I *know* it to be so. Let then the family physician, when called to such cases, warn the parents of the fact, and he will, in fulfilling this duty, perchance save the lives of some of the family.—*Am. Medical Times.*

Uræmia.

A paper on this subject was read before the Medical Society of London (Nov. 5, 1860,) by Dr. RICHARDSON. He first pointed out the analogies which exist between uræmic poisoning and poisoning by certain common narcotic substances, such as opium and belladonna; and then passed to the description of cases in which sudden symptoms of uræmia had terminated quickly in dissolution. Thence proceeding to the diagnosis of uræmia, he passed through each phase of the disorder, particularizing the symptoms with much care. Three points in this part of the paper may be mentioned as of interest. The pupil, Dr. Richardson has observed, is usually fixed in uræmia, and in most cases is dilated; but, he added, this rule is not without exception, for he has seen the pupil contracted to a pin's point in a case of unmistakeable uræmia. There is in some cases, as Frerichs has said, evidence of and excess of ammonia in the breath during the acute attack; but this is not universal, and hence some have denied it altogether. The reason of a difference in this respect in different cases is very simple. In persons suffering from kidney disease, and in whom uræmia is a probable occurrence, the breath at the best of times is charged with ammonia to an extent greater than is normal. In these cases the lung is supplementing the kidney, and the elimination of the ammoniacal product is, in fact, the saving clause. It is when such persons take congestion of the lung, and are subjected to diminution of excretion by the lung, that the uræmic symptoms advance; and in these cases the breath is not ammoniacal during the attack. But there are other examples, where the uræmia is sudden in its appearance, owing to sudden arrest in the function of kidney simply. Then the breath is markedly ammoniacal in the period of the acute attack. The third fact, as diagnostic of uræmic pois-

oning from poisoning by the ordinary narcotics, is, that during uræmic coma the patient will often rally and regain all his consciousness for a time, sinking again into forgetfulness, and even dying unconscious in the end.

The cause of death in uræmia formed the matter of another section of the paper, and was followed by observations on treatment. In the treatment of uræmic narcotism coming on suddenly, in a person not debilitated by previous disease, and not overloaded with fat, Dr. Richardsou stated his belief that there was one ready and direct remedy, and that was free bloodletting. He had seen a man who had lain three days comatose and unconscious recover, under the immediate influence of loss of blood, so completely as to transact business affairs, and inquire into all that had occurred since he was struck down. Moreover, physiological reasons supported this treatment; for the bloodletting not only relieved the body from a portion of the poison, but removed the congestion of the kidneys and of the other organs, and gave the permit for recovery, if recovery were possible. Thus, in animals in which artificial uræmia had been produced, the effect of frequent vensection tended greatly to prolong life. That blood-letting should not absolutely relieve in every case was reasonable, for whether relief was obtained or not in any case, would depend upon the degree of mechanical obstruction in the kidney; for if the obstruction were perfect, no treatment would be possible, seeing that no proceeding could be adopted to supplement the kidney altogether; but if in any instance there should be but partial obstruction, increased temporarily by congestion, then the act of abstraction of blood gave the only chance that remained of removing the burden from the excreting organ. The last part of the paper dwelt on uræmia in its forensic aspects. In many cases where death is supposed to have occurred from the effects of small doses of opium or other narcotic, he (Dr. Richardson) believed that the cause was attributable to uræmia, and that so-called idiosyncrasies were probably intimately connected with renal disorder.—*Lancet*, Nov. 17, 1860.

Surgery.

Rodent Ulcer.

JONATHAN HUTCHINSON, Esq. Assistant Surgeon to the London Hospital, has published in some recent numbers of the *Medical Times and Gazette*, a very interesting statistical report of forty-two cases of rodent ulcer, or Jacob's ulcer as it is also called. The following are Mr. Hutchinson's deductions in regard to this affection:—

"1. That there occurs not unfrequently on one or other part of the face a form of ulceration which is characterized by an indurated edge, and by a tendency to spread to adjacent structures, without regard to difference of tissue; which is very slow in its progress; does not cause much pain; does not induce cachexia, and is never followed by enlarged glands or deposits in the viscera.[1]

"2. Sections of the indurated edge of this ulcer (or of the portions of new growth which are sometimes produced

[1]In making this assertion I am borne out by all the facts hitherto recorded. Fully acknowledging, however, the near relationship of rodent ulcer to cancer, I have but little doubt that it will now and then so far deviate from its usual course as to affect the glands, and quite anticipate in the future to hear of such a case. Epithelial cancer may be said to almost never affect the internal organs, yet a few cases are on record in which it has done so. Such exceptions, however, only prove the general rule; and just as the epithelial cancer very exceptionally affects the viscera, so will rodent very exceptionally affect the lymphatics. Professor Langenbeck has mentioned to me a case in which he excised a rodent ulcer from the side of a woman's nose, who afterwards remained well for nine years, and was then attacked by cancer of the uterus, followed by secondary growths and death. Such a fact is, however, very different from one in which the cancerous infection should advance, as in other malignant disease, through the lymphatic system, from the original ulcer.

about it) do not exhibit the cell-structures met with in epithelial or scirrhous cancer, but only those of organizing fibrous tissue.

"3. This ulcer differs from lupus exedens in that it never occurs in the young, and never gets well spontaneously, while lupus exedens but rarely begins after the age of thirty, and usually tends after the lapse of time to cicatrize spontaneously. The two, also further differ, in that lupus has a tuberculated, inflamed border, without any great degree of induration; while the edge of the ulcer in question presents an extremely indurated ridge, without tubercles, and compartively free from inflammatory congestion.

"4. The ulcer in question differs from cancer in that there is but seldom present any tendency to the production of new material, that it never causes the glands to enlarge, nor induces morbid growths in the internal viscera.

"5. Although it must be freely admitted that this disease is closely allied to cancer, and that in its inveteracy under treatment, and its tendency, if not removed, to spread deeply and extensively, it well deserves the designation of 'locally malignant,' yet it is inconvenient in practice to call it 'cancer of the skin,' since there are other forms of cutaneous cancer (the epithelial, scirrhus, melanotic, etc.) essentially different from it, and of a far higher degree of malignancy.

"6. The term 'a peculiar ulcer occurring in the eyelids,' is too vague, and also involves an erroneous statement as to uniformity of location, an objection which, also, in addition to what has been stated above, applies to "cancer of the eyelids,' since this ulcer is met with on many other parts besides the palpebræ.

"7. To the designation of rodent ulcer given to this disease by Lebert, and adopted in this country by Paget (see *Lectures on Surgical Pathology*) no objection applies, excepting that it is more vague than desirable. Of those in use it is certainly the best, and should the disease become

generally recognized by the profession under that name, the vagueness of its meaning will by custom soon cease.

"8. The rodent ulcer is most commonly met with between the ages of 50 and 60, and is equally frequent in the two sexes.

"9. It occurs but very rarely on any other region than the integument of the face, and is most common on the eyelids.

"10. It is a singular and very significant fact that no case has yet been recorded in which the rodent ulcer attacked the lower lip, either primalily or by extension, while that part is well known to be a very frequent seat of epithelial cancer.

"11. The *diagnosis* of rodent ulcer is usually easy. An ulcer with a hard sinuous edge, situated on some part of the skin of the upper two-thirds of the face, of several, or perhaps, many years' duration, almost painless, and occurring in a middle-aged or elderly person, of fair health, and without enlarged glands—such a sore is almost certain to be of the rodent type.

"12. The *prognosis* of rodent ulcer varies with the stage of the disease and the treatment it is intended to pursue. If left to itself it will slowly but surely advance both in extent and depth, and will probably destroy the patient's life in the course of from ten to twenty-five years, death being eventually produced by the exhaustion consequent on suppuration, hemorrhages, pain etc., and very probably aggravated by inability to take sufficient food owing to the diseased state of the mouth. If the case be seen in an early stage while complete removal either by knife or escharotics is practicable, a favorable opinion may be given as to the probable non-return of the disease. The younger the patient the more rapid will be the course of the disease, and *vice versa;* and the younger the patient the more nearly is the disease allied to cancer, and the more likely to recur after removal.

"13. The only *treatment* which the rodent ulcer admits of is local, and the best is that which obtains its freest removal with the least injury to the parts concerned. In some localities, and in some stages, escharotics, such as the chloride of zinc, may be advisable, but in most excision and transplantation of skin is the more certain and satisfactory.

"14. A widely-diffused knowledge of the true pathology of rodent ulcer may be expected to result in considerable advantage to the sufferers from that disease, since it will encourage to the early and free adoption of local measures and to the employment of incision and transplantation even in some cases which, if considered cancerous, would certainly be beyond relief by surgical art."

The following further remarks on the treatment may be quoted:—

"The rodent ulcer is to be viewed, as far as our knowledge extends, as a local disease, which spreads by continuous growth. There is not a tittle of evidence in favour of our belief that it can be influenced by internal medication. The object which the surgeon must keep in view is to remove the whole of the diseased parts, and to procure a soft, supple cicatrix. If there be any tension on the cicatrix, the irritation thereby induced will be almost certain to induce a relapse of the disease. By means of deep escharotics, such as the chloride of zinc, complete destruction of the diseased parts may in many instances be insured, and a very healthy and pliant cicatrix is usually obtained by this remedy. In many of the favorite seats of rodent ulcer, the eyelids to wit, the use of escharotics is very inconvenient; and in these free excisions, followed by the transplantation of healthy skin from the forehead, cheek, or temple, is the best measure. The details of such operations will vary with each individual case, and do not form part of our present report."—*Am. Journal of Med. Sciences.*

Painful and Irritable Ulcers.

BY JOHN HILTON, ESQ., F.R.S.

I promised, Mr. President, before concluding these lectures, to refer to some cases occurring in the practice of a surgeon, which shows the good effect of "physiological rest," and as yet I have scarcely had any opportuuity of alluding to the subject. The only exemplification of the principle of "physiological rest" as a curative agent which my time will admit of my using is that of the painful irritable ulcer. An irritable ulcer is to be distinguished from an inflamed ulcer, no doubt, by the quantity of lymph which is poured out upon the inflamed ulcer, and the high degree of its temperature. Irritable ulcers, as we know, are exceedingly painful, and sometimes very difficult to cure. As far as I have been able to detect their real essential pathological character, it depends upon the exposure of a nerve on the surface of the ulcer. Of course it is quite clear that every ulcer must have nerves more or less exposed on the surface; but in the case of an irritable ulcer, it seems probable that the sheath of the nerve is destroyed, and that the end of the true nerve-fibre or tubule remains denuded and so causes the exquisitely sensitive and painful character of the ulcer. Upon this exposure of the nerve depends, I believe, the chief feature of what we term an irritable ulcer, and the method of detecting the precise seat of the exposed nerve is very simple. You must understand that my remarks on this subject are founded on an experience in such cases of twelve or fourteen years. Having a very painful uninflamed ulcer before you, you apply the blunt end of a common probe upon the sore, and as you move it about, presently the patient exclaims, "Oh! there you hurt me dreadfully." Then you go a little further on with the same method of examination, and scarcely any pain is felt; but on coming back to the same spot, the patient is

again "dreadfully hurt." At that painful spot some small nerve is exposed on the surface of the ulcer. The first time I observed this fact, and placed upon it what I believed to be the right interpretation of it, was in a case of a patient who had a thecal bursa extending from the palm of the hand under the annular ligaments to above the wrist. I made an aperture into the bursa above the wrist large enough to let out all the fluid and contents, and the bursal swelling gave me no special trouble, and it was speedily cured; but at the seat of the opening a very irritable painful ulcer remained which I could not cure by any local application. On examining the ulcer with a probe I discovered a point of exquisite tenderness. The normal position of the small palmar branch of the median nerve corresponded with the site of the local sensitiveness, and seemed to explain the pain. I then passed a small pointed bistoury under the track of the nerve above the tender spot, so as to divide the nerve between the spinal marrow and the irritable point of the ulcer; from that time the pain ceased, and the ulcer rapidly healed. It was cured by the "physiological rest" resulting from the division of that little nerve.—*London Lancet.*

Clinical Remarks on Encephaloid Cancer of the Testicle, with a Case; Delivered at the Pennsylvania Hospital, January 9th, 1861.

BY JOSEPH PANCOAST, M. D.,

Professor of Anatomy in the Jefferson Medical College.

This was a singular case of disease of the testicle, in which the positive diagnosis could not be determined until during the operation. Before operating, Dr. Pancoast said that his colleague (Dr. Norris) and himself had carefully examined the case, but none of their examinations resulted in a positive idea of the nature of the disease.

The man is a sailor, 34 years of age. He has never contracted any venereal disease; has had no scrofulous affection anywhere; is in the enjoyment of perfect health, having had but little sickness in the course of his life, and presents the appearance of the most perfect health. He has an enlarged globular scrotum, and this is the only evidence of disease about him. It cannot be a gonorrhœal affection, involving the parts within the scrotum—hernia humoralis —nor an orchitis,dependent upon some irritation made upon the prostate or upon the membranous portion of the urethra by the passage of bougies, which often gives occasion to chronic enlargements of the organ; the history of the case is all to the contrary.

Nor can it be a scrofulous or tuberculous testicle, the appearance of the man's general condition being sufficient to exclude any such cause. The patient is too young and too hearty to cause a suspicion of hydrocele, though it may possibly be such a tumor, with exceedingly thick walls. If the man had had a hernia humoralis or an orchitis, or suffered some recent injury, it might have been supposed that the gland had inflamed and swelled up, and, subsiding after a time, left a hydrocele.

The tumor is not particularly heavy, though it is heavier than a simple collection of water (the same size as the tumor) would be.

All these solid tumors were originally called sarcocele, no matter what the origin. If there was water present,the tumor was a hydrosarcocele, etc.; but the word sarcocele meaning merely a fleshy swelling, has been excluded from modern surgery as a vague term.

The term sarcocele was often used to denote a chronic enlargement of the testicle, sometimes dependent on a badly treated gonorrhœal affection, or chronic enlargement of the epididymis, occurring idiopathically. Scirrhous degeneration of the testicle, and various other forms of disease of that organ, were all denoted as sarcocele.

It is a question whether this tumor be not a hydrocele. If so, it has a most extraordinarily thick and dense serous coat. There is no distinct fluctuation as of water; but there can be distinguished an indistinct movement, approaching fluctuation, and, when pressed upon, it seems partly fluid, and presents the same resistance to the hand in all its parts,

Is it a scirrhous testicle?

When there is a scirrhous testicle, or cancer in its chronic stage, the tumor is always hard, heavy and irregular. This is not the case in the present instance.

Again: a scirrhous tumor is very painful, and especially so after handling. The patient never experienced any sensation of pain from this tumor, though it has given him a painful dragging sensation on account of its weight; but he has no shooting, darting, lancinating pains, and therefore it can scarcely be considered cancer.

We are therefore led, by exclusion, to the conclusion that it is either a case of hydrocele, an hydatid enlargement of the organ, or a case of encephaloid cancer of the testicle. It is in just the class of persons which this man represents that we find cases of encephaloid disease of the testicle. Prof. Pancoast has operated for encephaloid testicles on lads of fifteen and sixteen years of age, and also in men of fifty and sixty, though it is usually in men under the age of thirty years that encephaloid disease occurs.

There is one peculiarity about this form of disease—that it forms in the body of the testicle. It begins in the glandular structure of the organ, within the tunica albuginea; whereas in epididymitis, orchitis, scrofulous and tuberculous testicle, the disease is very apt to begin in the epididymis. But in encephaloid testicle it is the body of the gland that is most affected, and sometimes exclusively. When this is the case, the tumor retains the same globular shape of the testicle as in the present instance. The testicle of the patient is, perhaps, rather rounder than it should be, and somewhat broader in proportion to its length.

In encephaloid cancer of the testicle, there is seldom any pain in its commencement. Hence, from the want of pain in the tumor, its round and globular shape—from the freedom of implication of the cord—from the age and healthy aspect of the patient—the disease is quite as likely to turn out to be encephaloid disease as to prove an unusual case of hydrocele or hydatids.

Then the question arises as to what could have been the exciting cause of these encephaloid tumors. A single blow on the testicle is often a common cause of the development of encephaloid cancer.

The worst form Dr. Pancoast ever met, was produced in a young man by a blow from an apple thrown at him by a friend. In these instances the blow breaks some of the delicate blood-vessels contained in the cellular tissue of the organ; blood is poured out from them, and a disease is set up which takes the form of cerebriform cancer. The first stage of the disease is effusion of imperfect plasma in the body of the organ among the lobules, which forms into a little grayish mass, remaining dormant for a long time, and then gradually developing; cells are formed containing nuclei, which, forming into cells, burst their envelopes, and become in their turn mother-cells, which burst again as new cells are developed, and thus the growth becomes larger and larger; and as these cells press upon the lobules, they drive the seminal fluid out of the seminiferous tubes entirely and occupy its place. Then softening commences, and the disease invades even the hard, fibrous albugineous coat of the organ; the development of these cells increases, the fibrous coat is softened and made to yield in all directions, and all this without causing much pain. So it advances, and, while it remains even of considerable size, there is no change visible in the surface of the skin; but when it attains a certain size, the parts become excessively vascular—there is always increase of vessels, and hence the skin has a violaceous color, and is covered with large vessels, while the cord eventually becomes also enlarged. When the tumor has gone on to

this stage, it is too late to attempt a cure by an operation for its removal; for, by this time, the cancerous matter has passed into the absorbent vessels, whose course it follows into the glands—not the glands of the groin, for the absorbents from these parts pass up into the cavity of the pelvis, and the first glands they meet are the lumbar glands placed upon the sides of the iliac arteries; and if, in a case of encephaloid disease of the testicle, but one single gland in the lumbar region can be felt enlarged, it may be taken for granted that it would be almost in vain to perform an operation; for, if the glands have become involved, there is no help for the patient.

Sometimes these enlargements are developed so that they look somewhat like the pancreas, and for this reason the tumor they form was formerly called Pancreas of Asselli.

The tumor of the patient in question presents nothing but an enlarged globular appearance. The skin of the scrotum is perfectly natural in appearance.

It gives an indistinct fluctuation, like that which would result from cerebriform cancer when becoming soft.

To determine the nature of the affection, as to whether it was hydrocele or encephaloid disease, a small trochar was passed into the centre of the mass, and the point was found to move about very freely in the tumor, showing that the contents were very soft, while blood flowed freely along the edge of the instrument proving the structures to be vascular.

A cautious opening was made to see whether the tumor contained a collection of water in an unusual place, or whether the gland itself was enlarged and soft and malignant; the desire of the patient being that the latter should be found the case, it was to be removed while he was still under the influence of ether.

As it would be necessary to detach the cord in case the disease proved cancerous, and the testicle had to be removed, the ecraseur was chosen to divide the cord in mass, instead of strangulating it by a strong ligature, or cutting the

cord little by little, and ligating the arteries as they spring, which is the plan preferred by many surgeons.

The cremaster muscle, being attached to the cord, would jerk the divided end within the external abdominal ring, and if any blood should flow, contrary to the usual experience with the ecraseur, it would pass into the cavity of the abdomen and might produce serious mischief.

To provide against any possibility of this, or of secondary hemorrhage, it was always advisable to pass a ligature through the cord, above the point where the ecraseur is to be applied, so that, if necessary, the cord could be drawn down.

As a lancet-shaped needle might puncture some of the vessels, the ligature is best applied by means of a darning needle, which may be worked through so as to go between the vessels.

Hernia humoralis, chronic epididymitis, orchitis, etc., usually occur on the left side; and many writers have endeavored to discover some assignable cause for this peculiarity. It has been supposed to be owing to the general habit of carrying the scrotum to the left side of the pantaloons; and Ricord states, that in one case in which he met hernia humoralis on the right side, the patient was in the habit of carrying his scrotum on the right side of the seam in his pantaloons.

The tumor in the present case occupies the right side of the scrotum.

The operation was then performed by dissecting the different layers, one by one. A very small opening was made first, a fold of the skin of the scrotum being raised up and the knife passed flat through the base, then through the dartos muscle, down to the tunica vaginalis communis, which was grasped up in like manner, and opened on the groove director, and the knife passed through.

The tunica vaginalis was found adherent to the tumor, all over; the body of the testicle itself appeared to be the seat of cerebriform cancer in its early stage, without ex-

cessive softening, yet some fluctuation; a small opening made into it fully determined its malignant character.

The testicle was taken out with its serous tunic by drawing it from its bed, a plan much preferable to dissecting out the tumor, as it gives complete access to the cord, at the same time bringing away with it all the adjacent cancerous matter.

There was no apparent disease of the cord, which was then ligated by the needle being worked through, in the manner described, the thread being knotted so as to form a loose loop.

The ecraseur was then placed around the cord, close up to the thread and just below it, and gradually tightened—about seven minutes being consumed in the operation of cutting the cord; for if the parts be divided quickly, it defeats the main object of the employment of the instrument, which is, that the vessels may be divided, avoiding hemorrhage, by slowly crushing them under the chain of the instrument. The action of this instrument is such that the most vascular tumor may be removed without hemorrhage following, provided time be given for its removal. The cord was divided without loss of blood, and the piece cut off was so bruised as to be bloodless, hard, and firm, looking like a piece of india rubber, before it has taken the dark hue. The cord appeared perfectly healthy, and not even enlarged. The parts were dressed in the usual manner.

The timely operation in this case may protect the patient from a return of the disease; but, with our knowledge of the disposition of these tumors to prove fatal in the breast of the female, and even more so in the scrotum and testicle, there is reason for doubt in the prognosis.

If it should return, affecting the deep-seated lumbar glands, the disease will be entirely beyond relief.—*Medical and Surgical Reporter.*

Treatment of Fractures in the Royal Infirmary.

JAMES SPENCE, Esq., Lecturer on Clinical Surgery, gives the following account of the treatment he adopts, in the Royal Infirmary, Edinburgh, in cases of fracture:—

"In cases of fracture of the shaft of the femur, I employ the long splint, together with two short splints, fixed with slip knots on each side of the broken bone, to prevent any lateral displacement. In fractures of the neck of the femur, the long splint, without the lateral support, is used; but in many cases of old infirm persons, in whom the use of the splint cannot be continued, I have recourse to the following plan: A long narrow pillow or pad is placed between the legs, extending from above the knee to below the ankle, and the injured limb is secured to the sound one, by bandages at the knees and ankles, a broad flannel spica bandage being applied round the pelvis, and over the upper part of the injured thigh, so as to fix the thigh and pelvis. I prefer this plan to the double incline of pillows, as it not only insures greater fixity and extension, but also enables us to place the patient occasionally on the sound side, and so diminish the risk of bed-sores forming on the back. In cases where, from extensive bruising of the body or limb on the injured side, or other causes preventing the use of the splint, and where, at the same time, full extension is desirable, I apply the long splint on the sound limb, and then keep the injured limb fully extended, by fastening it to the sound one thus fixed.

"In cases of simple fracture of the bones of the leg, I find the simplest and most satisfactory plan is the use of two lateral pasteboard splints with foot-pieces, moulded to the limb, secured by slip knots, the limb being laid on the outer side, and flexed to a greater or less degree, according to the nature of the fracture. In cases of very oblique comminuted or compound fractures, or in cases of fracture of

the tibia very high up, the use of Liston's splint, properly padded and adjusted, is the treatment I resort to. In fractures near the malleoli, attended with splitting of the lower part of the tibia, or separation of that bone from the fibula, in which the heel and foot are retracted, and the bones of the leg are projected, and where the tendency to retraction, recurring after coaptation, is considerable, the stirrup splint well paddled and placed on the front of the leg (used either alone or combined with narrow lateral splints), affords a fixed point to which we can bring forward the heel by bandaging, whilst, at the same time, it presses upon the bones of the leg, and prevents them projecting forwards. In cases of Pott's fracture of the fibula above the malleolus, attended with eversion and twisting of the foot, Dupuytren's splint, applied along the tibial side of the leg, is used as a fulcrum over which the foot is kept inverted, whilst at the same time, slight extension is preserved. For some cases attended with retraction of the foot as well as eversion, the stirrup splint may be used with advantage, the inner horn of the stirrup being made the fulcrum over which the foot is kept inverted, whilst retraction is obviated by bandaging the heel forwards to the splint. Of course, in the corresponding fracture of the malleolar part of the tibia, with inversion, the Dupuytren splint is applied on the fibular side, to keep the foot everted. With exceptional instances, I have always employed these simple methods, so long and successfully used in this hospital; and after very extensive experience in treating fractures in Hospital, Dispensary and private practice, I see no reason for changing to other methods which certainly could not afford me better results, and which seem to me attended with some risk, from which these ordinary plans are free. I allude, particularly, to the use of the starch bandage, and the plaster of Paris methods, of treatment, which are now much used on the continent. In regard to the starch bandage applied after the lapse of some weeks, when all risk of swelling, or other results of the local irri-

tation produced by the accident have passed away, and, as a means of abridging the period of the patient's confinement, I not only have no objections to it, but have recourse to it very generally. But, used from the very first, I think it objectionable, as preventing the surgeon from observing the state of the limb, and guarding against mischief. The advantage which some claim for it, that the patient may walk about with a crutch in a day or two after the injury, I look upon as no advantage, ; but on the contrary, I think the patient would be then much better in his bed, even supposing he felt the inclination to walk about. The plaster of Paris method, of course, has all the disadvantages of hiding the fractured limb from the surgeon's view, and, if I may judge from personal experience, when working with that material in taking casts, it must be anything but pleasant to the feelings of the patient, when it contracts in setting. I have seen a considerable number of cases of fracture of the leg put up in this manner in Germany, and I can easily understand that many such cases do well enough; but it is quite as likely that, in many cases, the mass of stucco in which the fractured limb is embedded, may be, very literally, a whited sepulchre. In a word, I think when we posses well-tried, simple, and successful plans of treatment, we should be very chary in departing from them. Novelty is not always progress, and unfortunately, many novelties in surgery at the present day seem to consist in departure from simplicity of treatment."—*Edinburgh Med. Journ.*, Nov.—*Amer. Jour. Med. Sciences, January*, 1861.

Obstetrics.

New Sign of Post-partum Detachment of the Placenta.

BY JOHN CLAY,

Senior Professor of Midwifery in Queen's College, Birmingham.

The rules usually given in obstetric manuals and text-books for the management of the placenta after the birth of the child are—to wait for a pain; or to carry the finger along the cord to the os uteri, and if its root can be felt, it may be fairly assumed that the placenta is thrown off, and may be easily extracted by gentle traction of the cord, with the aid of external manipulation. If these instructions be faithfully carried out, can we rely upon the facts elicited as infallible proof that the placenta is separated from the uterus? Pain may mislead, as it frequently arises from other causes than contraction of the uterus; and even if the insertion of the cord can be felt, it is not always conclusive on this point, as the root of the cord may sometimes be felt when the uterus is in a flaccid condition, by using moderate traction on the cord, and yet the placenta be not thrown off. Besides, the patient often lustily complains of the smarting pains caused by the frequent examinations deemed necessary to ascertain the fact; and often she positively forbids such a mode of interference.

Four years ago I was led to investigate the subject, with the view of improving, if possible, upon the old mode of managing the deliverance of the after-birth. I thus ascertained certain facts from which I came to the conclusion that a very simple sign existed by which the separation of the placenta, after the birth of the child, might be indicated; and having tested it in upwards of nine hundred cases, I hope I may be considered to be fairly entitled to

lay the results at which I have arrived before the profession.

Before dividing the umbilical cord, I always apply two ligatures, and make both sufficiently tight to prevent the occurrence of hemorrhage. If the maternal part of the cord is now examined, it will be found to be in a flaccid condition, and almost free from blood; but if it be again examined, at an interval, say from one to three minutes, it will be found to have acquired increased specific weight, and that the vessels are more or less filled with blood. The one fact may be ascertained by poising the cord on the fingers; the other by slightly grasping the cord near the vagina, with the thumb and fore-finger of the left hand, and with the fingers of the right hand suddenly compressing it, when a well-marked sense of fluctuation is perceived underneath the fingers of the left hand—a kind of resilience similar to the feeling produced when an elastic tube fillled with fluid is suddenly compressed.

When the placenta is thrown off, or sufficiently detached to give rise to a tolerably free hemorrhage, the cord loses its increased specific weight and the hydrostatic property just mentioned. These phenomena occur so invariably, that *the loss of the previously acquired hydrostatic properties of the cord after the birth of the child constitutes the sign of detachment* previously referred to.

The whole of the phenomena are manifested in three stages, viz: 1st, a state of flaccidity; 2d, a state of repletion; 3d, a state of flaccidity.

If the umbilical cord be slightly grasped by a spasmodic contraction of the os uteri, or by irregular contractions of the body of this organ, the *loss* of the particular hydrostatic properties may be delayed for a brief interval; but in a few seconds the spasm subsides, and those phenomena are produced which indicate the separation of the placenta, and that this structure may be safely extracted. The signs are not, of course, always equally marked in every case, often requiring experienced tactile management in order

to detect their presence. When the uterus is in a flaccid condition, the phenomena are manifested in a very slight degree, but are still perfectly reliable. On the other hand, when the uterus is contracted, with some degree of firmness, on the placenta, they are so well marked that the most inexperienced may readily detect them. In the cases of partially adherent placenta, the disappearance of the hydrostatic properties, after being once fully developed, and the failure to deliver the placenta by the usual manipulations, have always indicated to me the necessity of promptly adopting artificial detachment by the introduction of the hand. In twin cases, if the cord is firmly tied, I have invariably found that the signs persisted until the birth of the second child. In one case, where the hydrostatic properties disappeared, after being well marked, before the birth of the second child, I found, on examination, that the corresponding placenta was detached, and I at once removed it, which otherwise would probably have been suffered to remain. Neither mother nor child incurred any risk.

It sometimes occurs that the placenta is separated simultaneously with the birth of the child. In this instance the first series of phenomena may be absent, and it may be prudent to wait before proceeding to extract the placenta, although it may be generally effected with safety.

The practical value of these facts to obstetrics is obvious, as by merely compressing the cord in the manner previously indicated the precise time of separation may be easily ascertained, the placenta at once extracted, and the patient thus freed from those frequent annoying examinations usually employed. The prompt delivery of the placenta on the first efforts of the uterus, is very important, as this organ contracts then more efficiently, and the risk of hemorrhage is not so great, and it may be fairly assumed that the puerperal convalescence is not so protracted as under a more dilatory proceeding.

To students, or inexperienced practitioners, it might be a safe instruction to impart—not to interfere in the ex-

traction of the placenta so long as the hydrostatic properties herein defined are persistent.—*Dublin Quart. Journal of Med. Science*, Nov. 1860.—*Am. Journal Med. Sciences.*

Chronic Metritis.

Translated from the Gazette des Hôpitaux. By Medicus Ransom, M.D., Murfreesboro', Tenn.

Chronic Metritis (M. Becquerel.) *Treatment.*—We may class in seven orders the means used in the treatment of chronic inflammation of the uterus, but examining them in detail, I will point out some therapeutic rules, to which I attach very great importance.

1st rule. In parenchymatous metritis, though the mucous membrane may be perfectly healthy, we are often obliged to act upon it, especially when other means have failed.

2nd rule. In chronic inflammation of the cervix, we should not limit this action to the mucous membrane which lines the vaginal portion; but it is indispensable to extend it to the mucous membrane lining the cervical canal, as it may or may not be altered.

3rd rule. Applied in similar cases, the same remedies may succeed or fail. We know not very well the cause of these different results; therefore, when a remedy, after being used for a certain length of time, brings no good result, we should try another.

4th rule. Many different remedies may bring about a cure in chronic inflammation of the uterus. Under certain circumstances, five or six means succeed equally well in a given case. Thus, the same success may often attend the use of astringents, caustics, and cold water.

As regards the application of the means, we have established three other rules:

1st. We should, as much as possible, remove the cause of the inflammation, before commencing the treatment (forbidding coitus, violent exercise, etc.)

2nd. We should not forget that to render the treatment effectual, it is indispensably necessary to previously remove by injections morbid fluids which may be in contact with the diseased parts.

3rd. Every treatment of these chronic affections exacts a moderate but not absolute repose. We should advise our patients to take some exercise, but not to fatigue themselves, and to avoid sudden jars.

We come now to examine briefly each one of the seven modes of treatment which may be adopted:

1. *Antiphlogistic Treatment.*—Small revulsive bleedings, frequently repeated, have been often employed. Except in cases of sudden change from the chronic to the acute form of metritis, I proscribe them. I have seen patients who have had sixty or eighty of those bleedings in two or three years, and this mode of treatment had no other effect than to produce extreme anæmia. Now, as every sanguine emission gives relief for the time, both patients and doctors have been seduced by these deceitful ameliorations. I might say as much of leeches applied to the hypogastrium, and inner parts of the thighs. Here, as in acute metritis, there is no advantage in applying them to the cervix, and there may arise from it inconveniences and even dangers. This practice, recommended first by Dupracque, and afterwards extolled by Messrs. Bennett and Aran, ought, in my opinion, to be abandoned. When a state of exacerbation of the disease requires it, it is better to apply the leeches to the hypogastrium than elsewhere.

2. *Emollient Treatment.*—Many practitioners yet hold to this treatment. It consists in prescribing general baths, hip-baths, cataplasms, emollient injections of decoctions of marsh-mallow or bran. M. Cruveilhier has for a long time

made use of vaginal cataplasms. They are bags of fine cloth, filled with emollient substances, and are applied by placing them in a speculum introduced in the usual manner; the instrument is then withdrawn and the sac remains in the vagina. Those cataplasms, now generally abandoned, have the effect of calming the pain and affording a slight amelioration, but those advantages are but temporary. They, with other emollients, might be employed for whole years without effecting a real cure.

3. *Revulsive Treatment, properly called.*—It comprises issues, purgatives, and sudorifics. Some physicians have advised the application of blisters and cauteries to the thighs and lumbar region. They have gone further, and thought to apply blisters (tinct. cantharides) to the cervix even. Many physicians have even contended for the therapeutical discovery. I declare that it is a medication which I cannot approve. Often it acts in a disagreeable way upon the bladder, and besides, when the vesicatory has produced its effect, the disease is not generally modified. Since we have means more easy of application and of less doubtful efficacy, why not employ them in preference to those violent and unreliable proceedings? In England they have administered lavements in which have entered the very considerable proportion of 10 grammes of aloes to 120 of the vehicle. Some physicians had the credulity to believe, and to state, for some time, that this treatment availed more than all other. We know that this treatment induces diarrhœas, very troublesome, and very difficult to cure. I am convinced, moreover, that purgatives are but adjuvants. A very mild purgative weekly, suffices to favor the effect of the treatment, always somewhat complex, in chronic metritis.

M. Fleury has obtained good results from diaphoretics in most of the inflammations of the body of the uterus. In inflammations of the cervix, of some standing, the diaphoretics do not suffice.

4. *Astringent Treatment.*—I may say that it is most generally sufficient, together with injections of cold water, to

cure chronic inflamation of the cervix, especially when limited to the mucous membrane, or even when the tissue of the cervix is slightly involved. This treatment is employed in the form of injections of concentrated solutions, and of pencils similar to those of nitrate of silver. The astringents are:

1st. *Alum.* It determines the formation of pseudo-membranes, which are renewed without ceasing; this inconvenience has led me to abandon it.

2d. *Sulphate of Copper.* I shall reproach it with acting with too much energy.

3rd. *Acetate of Lead.* It is, on the contrary, too little astringent, and produces but an insufficient effect.

4th. *The Perchloride of Iron.* It is sometimes too feeble, and sometimes too energetic. The degree of astringency suitable for each particular case, is difficult to determine.

5th. *The Sulphate of Zinc, and Tannin.* These are the two best astringents which we can employ in the treatment of chronic metritis. These two medicines always succeed, but their use must be continued a long while. The same may also be said of cases where ulceration is present, and in which cauterizations are indispensable. I usually prescribe these astringents in the following proportions: Sulph. zinc, 10 grammes; Water, 100 grammes;—by injection. Or even the following concentrated solution: Tannin, 25 grammes; Water, distilled, 100 grammes. With this we saturate a tampon of wadding, and apply it to the cervix through a speculum, and leave it in contact four or five hours; at the end of this time the plug is withdrawn by means of a string previously attached to its middle. There are necessary from eight to ten of these applications at intervals of three days, to effect a cure in cases where the mucous membrane only of the cervix is affected. If the inflamation has extended to the uterine tissue, I prefer to employ astringent pencils. I invented this mode of application while physician to the Sourcine Hospital. The pencils to which I give preference, are composed of about three parts of tannin to one of gum

tragacanth, mixed with castor oil in such manner as to be of sufficient consistency to preserve its form. We make them about three or four centimetres (about 1½ inches) in length. On an average, eight applications, made at intervals of five days, have effected a cure.* The astringent treatment offers no inconvenience, and produces no pain.

I believe that when there is but a simple chronic inflammation of the mucous membrane, with or without granulation, but without ulceration, and even when the substance of the cervix is itself involved, the application of tampons saturated with a concentrated solution of tannin, or the introduction of the astringent crayons, are the only means to be employed.

5. *Caustic Treatment.* Caustics fill three indications, to-wit: 1. They destroy the diseased parts. 2. They impress upon the local circulation of the suffering part an increased activity. 3. They act as revulsives, by the eschar which forms, and the suppuration which succeeds.

The caustics employed are very numerous. I shall point out to you the most important in indicating the cases to which they are best suited.

The solid nitrate of silver is employed, above all, in chronic inflammations of the mucous membrane of the cervix with granulation, and excoriation. There are generally necessary from seven to ten cauterizations, at intervals of five or six days. A stick about ¾ of an inch in length should be introduced, half within and half without, the cervix. After this cauterization, we should never fail to make abundant injections, to remove the residue of caustic.

These cauterizations are excellent when the parenchyma is healthy. The nitrate of silver in concentrated solution,

*M. Becquerel makes these pencils cylindrical in shape, and about one-sixth of an inch in diameter; they are introduced into the cervical canal with the uterine forceps, and the tampon of cotton soaked in the solution of tannic acid, is applied. This is removed in about twelve hours, when the tannic acid cylinder is found dissolved. M. Becquerel uses as his "tampon" a ball of cotton.—Translator.

offers no advantages. This liquid runs over all the parts, spreads over parts which we wish to respect, produces unnecessary pain, and sometimes sloughs too profound.

The acid nitrate of mercury is a dangerous compound. It is to be hoped it will fall into obloquy.

The caustic potash, and the Vienna paste, have been extolled by M. Gendrin. M. Bennett, his student, has shown himself a partisan of this proceeding. They are to-day almost alone in the employment of these agents. Scanzoni and others have found that the application of these caustics throws the patient into a state of excessive prostration.

The cauterization with the hot iron, which has been so much abused, is an admirable means when properly applied.

It is principally in the fungous state of the cervix, that the actual cautery should be preferred to every other caustic; to the solid nitrate of silver, for example, which in such cases is of no utility. That the actual cautery may produce its full effect, it is necessary to cauterize superficially, and with the two irons in the following manner: The one, the smaller, No. 1, is introduced at a white heat, into the cervical cavity, and immediately withdrawn. The other, the larger, No. 2, heated to the same degree, is applied lightly, to all the surface of the cervix which is prominent in the bottom of the speculum. After having withdrawn the last iron, the speculum being yet in situ, I make an injection of many litres of cold water. In general there are necessary from two to five cauterizations, made at intervals of fifteen days, to effect a cure.

This operation, which is so frightful to females, is the most innocent of all the modes of treatment. It produces no pain, and is never followed by accidents when the cauterization is superficial. The granulations which have resisted the action of the solid caustic, yield very soon after a single application of the hot iron.

When the cervix is indurated and voluminous, it is useless to address any other means to it, than the actual cautery, and injections of cold water night and morning.

It is above all in these cases, that the galvano-caustic is made to render important service in deceiving the timidity of patients.

6. *Hydropathic and Sudopathic Treatment.*—I am in the habit of always having administered cold injections as adjuvant to other means. These injections, which in many instances are sufficient of themselves to overcome chronic inflammations, are often an indispensable compliment to other methods of treatment. These douches should be used two or three times a day, and very moderately. I use for this purpose, either the irrigator of Equisier, or the portable apparatus for the douche by M. Charrière. This small apparatus, which costs but 35 francs ($7), is generally chosen by patients who regard expense. The hydro-sudopathic treatment is adapted to cases of chronic inflammation of the body of the uterus. It consists in sweating the patients in an atmosphere heated by a spirit lamp, and when the sweat is well out, plunging them in cold water, or administering the shower bath.

This treatment, violent in appearance, has never any inconveniences, and produces excellent effects.

Puerperal Insanity.

Reported by Wm. B. Atkinson, Recording Secretary.

PHILADELPHIA COUNTY MEDICAL SOCIETY,
Wednesday Evening, Jan. 9th.

Dr. REMINGTON, President, in the Chair.

Dr. JOSHUA H. WORTHINGTON introduced the subject by an allusion to the importance of the malady under discussion, and the remarkable dearth of authorities from which to obtain information. The principal authorities are Esquirol; Dr. Macdonald, of New York, Dr. Gundry, of Dayton, Ohio; and Dr. Marcé in France.

The term "Puerperal" is not essentially significant as to the character of the symptoms of the type of the disease. Nor does it imply a dependence of the cerebral symptoms upon any sympathy with the child-bearing state, or it would cease upon the termination of gestation.

He then alluded to the laws and customs of ancient Rome in relation to the moment of parturition. The proportion of insane to parturients is extremely small.

The puerperal state is divided into three periods; utero-gestation; the period extending from delivery to the end of the second month, at which time the uterus has returned to its normal condition, and in women, who do not nurse, the menstruation is established; and third, comprising the period of lactation, extending from the end of the second period to the point of time after weaning, when the first menstruation is accomplished. He would consider the disease as it occurs during each month.

1. Without enumerating the numerous caprices, etc., of pregnant women, and which are so well known to obstetricians, he would merely mention some as showing the intimate sympathy between the pregnant uterus and brain.

Dr. Marcé relates the case of a woman who became hydrophobic during the first four months of each of eleven pregnancies. The dread of water began to be manifest soon after conception, and became so excessive, that she could neither drink herself, nor bear any one else to do so in her hearing, and to cross a stream of running water was equally as bad. Caseaux mentions a young lady, who, during her first pregnancy, felt an uncontrollable dislike for her husband, to whom she was tenderly attached, etc.

The liability to pregnancy is much less than during the period immediately following delivery. Of 783 cases of puerperal insanity, only 65 occurred during utero-gestation. The form is generally melancholic, and the causes, besides hereditary influence, are a depressed condition of the physical forces, and painful emotions. Some attacks terminate with a delivery, and various authors mention such cases. A remarkable feature is the almost entire absence of suffering during labor, and, also, we find a great exemption from the usual accidents of parturition. When the disorder can be clearly traced to the state of the uterus, recovery may be expected when delivery takes place. But when it is the result of some shock to the nervous system, etc., the prognosis is more favorable.

Temporary insanity at the moment of delivery, in consequence of the accompanying physical suffering, rarely occurs; all obstetrical authors describe the agitation and anxiety of the moment when the head of the child is passing through the uterine neck, and it is not wonderful that an acute attack of mania should occasionally supervene. Notwithstanding the severity of such attacks, they are seldom followed by evil consequences, except such as result from the violence of the female against herself or her offspring.

The following case by Esquirol, is suggestive of the considerations, in a medico-legal view, which may arise. The girl had made no secret of her pregnancy, and was all ready for her confinement. She was delivered during the night, and the next day the body of the child was found in the

cess-pool, mutilated with a blow from a pair of shears. She confessed the act without the least regret, and appeared entirely unconscious of having done anything wrong.

2. The period following delivery and extending to the third month, about which time, in those who do not nurse, the menstrual function is resumed, furnishes the greatest number of cases of insanity. Of 783 cases, 453 occurred during this period. The causes are such as belong either to the constitution or such as act upon the system from without, and may be called accidental.

After alluding to views formerly held upon this subject, he says the present state of knowledge leads us to believe that neither the suppression of the lochial discharge, nor of the lacteal secretion has, necessarily, anything to do with the mental disorder, since, in many cases, the disorder does not appear until after the normal cessation of such discharges, that is about the sixth or seventh week, and in cases where the disease has appeared, no interruption of the lochial discharge has occurred.

As far as the direct results of labor are concerned, Marcé attributes puerperal insanity to the constitutional disturbance attendant upon the establishment of the lacteal secretion, and to the general shock of the nervous system, which is the direct consequence of labor. The condition of the uterus may be next considered. Valpeau says that part of the liquid contained in the substance of this organ must now return, more or less altered, into the circulation. Portions of membranes, etc., may be left in its cavity, and give rise to morbific action, and, finally, the equilibrium, which is about to be established, tends to impart a fresh shock to the nervous system. The causes connected with the physical condition of these women cannot be regarded as sufficient to give rise to insanity, since they are present in all, though not attacked with the affection. Hence, we must take into view the causes of general insanity, as a constitutional tendency, either hereditary or acquired. In 56 cases 22 were either descended from insane ancestors, or

had collateral relatives who had been insane. This corresponds with the proportion of Esquirol, while Dr. Burrows found in eighty, more than half hereditarily predisposed.

All influences which tend to lower the standard of health and produce anæmia, may act as causes of the disease. Women who have had several children, and are exhausted by lactations, and labor under the strokes of poverty, are most liable. Among 57 patients, only 14 were primiparæ, and of the remainder, 13 had passed through five, six, or even more confinements or abortions. Women are also more liable as they advance in years, and once attacked, they will be extremely liable in future confinements, requiring great precautionary measures.

Esquirol considers moral emotions as an important cause, but is opposed in this view by Burrows and Marcé. The latter, however, attributes to fear, violent sorrow, etc., nine cases in a total of 66. Such causes are known to produce a large proportion of cases in the non-puerperal state, and their influence could not be expected to be less upon a puerperal female, than one in ordinary health. Cold, or neglect of any kind, may aid in its production.

Marcé regards the return of the menstrual flow as exercising an unquestionable influence in the causation of this malady, and relates cases to prove his assertion. Of 44 persons attacked during the second period, eleven became insane about the sixth week. The lesson to be drawn from this should teach the physician to regard this as a critical period, and therefore, to use every precaution till it is safely passed.

Mammary abscess, difficult and protracted labors, uterine hemorrhages, puerperal convulsions, and the inhalation of chloroform, have been accused as causes, though many differences exist between authors on these points.

The symptoms of puerperal insanity at this period present no peculiarities. Generally, the lochial discharge and the lacteal secretion take place as usual, and the intellect-

ual disorder is not different from that observed in ordinary insanity.

The only affection with which it is likely to be confounded is acute meningitis. Generally, however, the absence of fever, or other symptoms which indicate a grave physical lesion, will show that inflammation is not present.

The terminations of this form of insanity may be in recovery, incurability, or death. The other may be anticipated in cases where the affection is due to long-continued grief, care, or anxiety. Death generally occurs in chronic cases, by some affection of the lungs or bowels; in acute cases death most frequently ensues from what the French call acute delirium.

When mania is about to terminate in this form, the agitation and excitement daily increase, the tongue becomes dry, the digestive functions are impaired, the pulse increases in frequency, and soon exceeds 120 pulsations per minute; the face is flushed, the eye has a wild expression, and the skin is covered with a clammy sweat. The patient becomes the prey of constant hallucinations, wastes her strength in violent muscular efforts, and is scarcely conscious of surrounding objects. She passes whole nights almost without any sleep, and obstinately refuses all nourishment, but especially liquids. A striking peculiarity is the great terror constantly evinced by the patient.

If, in a few days, no improvement occurs, other unfavorable symptoms ensue, collapse comes on, and death speedily closes the scene.

These symptoms, however, may be prolonged for a considerable time, emaciation may go on rapidly, the urine and stools being discharged involuntarily, and death occurs in one of many fits of syncope.

The anatomical lesions are disproportioned to the gravity of the symptoms. There is neither thickening of the membranes, nor alteration of the cortical substance, nor secretion of plastic lymph, nor any of the changes which ordinarily denote inflammation. There is generally, however,

vascular congestion of the minute blood-vessels of the pia mater, and Dr. Calmeil considers the affection to be a true inflammation of the cortical cerebral substance, and has given it the name of *peri-encephalitis.*

3. The condition of females during lactation has been aptly called a prolonged puerperal state. The patient, according to Calmeil, is more nervous and impressible and accessible to morbific influences. Such patients may be attacked during the first six or seven weeks after labor, but such cases may be more properly regarded as belonging to the second period. Those which belong especially to this term, set in after eight or ten or more months of lactation, when the system has been exhausted by the long continued drain. In a small number the malady commences after weaning. As a consequence of the exhaustion produced by lactation, some women are met with in a state of intellectual enfeeblement, the memory is slightly impaired, the ideas are confused, and the patient acts strangely. All the symptoms of anæmia are present, emaciation takes place, and the whole system is more or less disturbed. The milk may be diminished in quantity, or if it remains, the emaciation is more rapid, and shortly hectic fever intervenes. From this state she may pass imperceptibly into that of decided insanity, or it may suddenly be established by some emotion, or error of regimen, etc. Mania and melancholy are the most frequent forms as a result of these causes. Generally the milk continues to be secreted, though it may be suspended in the midst of the excitement. Of forty cases, but six had suppression of this secretion, and another observed, Dr. Marcé, has never seen this occur.

A considerable number become insane immediately after weaning Some are of a plethoric habit, and have borne lactation perfectly well, In such the sudden suppression of an evacuation, which has continued for many months, induces a state of plethora, which may end in disease. In others, though weakened by it, the system has become accustomed to the drain, and adapted itself to it. In these,

precautions are necessary when weaning, to prevent the supervention of the disease.

The effort to maintain the menstrual discharge will have the same tendency, and the return of this function may be accompanied by such disturbance as to result in insanity.

The prevention of this affection, when threatened, will consist in instituting proper hygienic measures; avoiding every source of exhaustion; giving nutritious diet, especially when hemorrhage to any extent has accompanied parturition; and guarding her against excitement of any kind. When lactation is the cause, the child should be weaned, at the same time care being taken to prevent any other disturbances from arising by the accumulation of the milk. The same may be said of menstruation; great care is necesary to prevent exposure to cold until this function is re-established.

As in ordinary insanity, so we know so little of the lesions of this form that we are compelled to rely in forming our judgment of its nature upon our information as to the causes and circumstauces under which it originates. Autopsies generally fail to show any sign of inflammation, though Calmeil, from his researches, has concluded that the acute form of delirium is an inflammatory disorder of the cortical cerebral substance, and yet he regards it as one not allowing the use of antiphlogistics. McDonald adopts a similar view.

For the treatment, various measures have been proposed, as blood-letting, tartar emetic as a contra-stimulant, warm baths, purgatives, narcotics, etc. All depletory remedies have proved injurious in the vast majority of instances. They have even been thought to confirm the disease in several cases.

In the commencement of an attack, it will generally be necessary to place the patient in a room partially shaded, kept as quiet as possible, and into which no one should enter except the necessary attendants. A warm bath continued for two or three hours in the evening will tend to allay

nervous irritation and promote sleep. The bowels should be regulated by laxatives—continued according to circumstances, till the digestive functions seem to be in proper order. Some gentle narcotic, as a combination of asafœtida, hyoscyamus, and camphor may be given every three or four hours. The diet should be nutritious, but not stimulant, and may advantageously consist, in a great part, of new milk, given as freely as the patient can be induced to take it, or as the stomach will bear it.

If an increase of maniacal excitement should occur, the same treatment may be continued; but here, in consequence of the difficulty of controlling the patient, and getting her to take food and medicine, confinement, as by means of the bed-strap, will become necessary; thus her strength will be husbanded, and the management be rendered easy and effectual. In many cases of acute delirium, the patient refuses food with obstinacy, and the œsophagus tube should be passed through the nostril, and milk, beef-tea, or other liquid nourishment may be passed at regular intervals.

If there be increased heat of the scalp, it may be removed by warmth to the extremities or a dose of laxative medicine, or cold to the head. Mustard pediluvia in the evening are always of service, and blisters to the extremities have been found useful as derivatives. It sometimes happens that, with considerable mental anxiety. evidences of cerebral oppression will become apparent, the patient is conscious of everything about her, but appears to labor under difficulty in collecting her thoughts, and in recalling the occurrences of the day; and, in attempting to do so, her mind becomes confused and the effort fails of its object. When such symptoms occur, in the absence of fever, a large blister, covering the entire scalp, has been found productive of decided good effects and relief to all the symptoms.

In presenting these remarks, he would conclude by saying that the opinions are such as he has formed after a

careful comparison of the observations of those who have written on the subject, with his own experience.

Dr. DARRARCH expressed his admiration of the term "puerperal insanity," because it is significant of the etiology and pathology of the disease under discussion, and also suggestive of its therapeutics.

The other terms, in the nosology of insanity, are less scientific. Mania and melancholia relate chiefly to the two opposite stages of excitement and depression; dementia, in its unrestricted use, means the sequelæ of insanity, the condition of senile atrophy, or the concomitant of congenital cerebral defect or of arrested cerebral development; monomania designates only specialities; and the recent and unconventional phrase "moral insanity," is only the materialist's notion of human depravity, which makes the world, in all ages, an insane hospital. These terms, he was satisfied, from observations in the insane asylums of this country and of Europe, and from his service in medical institutions, were hygienic, and more suited for the arrangement of patients than for pathology and therapeutics.

Not so the phrase "puerperal insanity." Here is signified not only the cause and effects, but their different localities —the latter in the brain, and the former in the uterus, is suggestive of two indications in the treatment: the one, cerebral palliatives, to control the symptoms; the other, radical agencies, to restore the uterus to its normal conditions.

Before the pathology of morbus coxarius, vesical calculus, and membraneous hepatitis were discovered, appliances were exclusively and mainly made upon the seat of the symptoms—the knee, glans penis, and shoulder.

Then may it not be that, in the treatment of puerperal insanity, there is unwisely the exclusive direction of medical appliances to the brain, and, owing to disregard of the casual word "puerperal," the omission of tonics to the reproductive organism.

To confirm this, he called to mind the three purposes of the animal organization, viz: by a nutritive organism to

sustain life, by a senso-motor organism to hold the relations of life, and by a reproductive organism to perpetuate the species.

This last, the reproductive organism, is the compound of the others—the nutritive and senso-motor; thereby it not only accumulates arterial and venous blood, animal heat, and concentrates the force of both cerebro-spinal and gangliar systems, but also obtains a power of wonderful increment and of surprisingly sudden decrement. The genital system, the cœliac plexus, and the medulla oblongata are the nodes of vital force, and of them the first noticed is the most powerful. Its budding, at the onset of the third climacteric of life, affects our entire humanity, not only for our present but future state of existence. Our emotions, passions, faculties, and functions are thereby perfected, and, after seven years' training, are fit for full operation.

If, then, this compound organism exercised, in its normal state, an empireship for good, what, when diseased, must be the extent of its influence for evil? Of this, a mere page is afforded by the primary, secondary, and tertiary stages of syphilis, with its horrid and multiform sequelæ and catenations; another page is afforded by consanguineous marriage; a third is that from erotism. To this, as throwing light on the therapeutics of puerperal insanity, he would direct attention.

The form of erotism most allied is that of erotic mania. A case in illustration, which he cited, was that of a colored prisoner of the Eastern State Penitentiary, in the year 1837. The watchman reported him walking his cell all night, out of his mind. When visited medically, he was found standing in a fixed position, regardless of things and persons, and gazing up at the arch of the cell, and his eyeballs in quick and constant motion; his muscles were tremulous, the pulse was relaxed and refluent, and his food and bed at night neglected. The cold, damp hands, which Dr. D. discovered subsequently to be pathognomonic, was a symptom which, in this first case, was unnoticed.

The case, though peculiar, was, nevertheless, diagnosed

to be somehow mania a potu. A second and third case, and subsequently several additional cases, occurred; and there had been, previous to his service in the institution, similar cases which, indeed, had been prejudicially reported as cases of direct mental insanity, induced by the separate system of imprisonment.

Neither this nor intoxication was the cause, for, with few exceptions, the cases were among the debased negro prisoners without intellect, and who had been without rum for several months. The cause was masturbation; every other sensuality being debarred they indulged in this the more. The damp cold hands which Dr. D. had noticed in cases of erotism and leucorrhœa he, in time, discovered to be a constant sympton in not only these prison cases of insanity, but also in erotic cases of his private practice. In these the coldness and dampness was always associated with a purplish red color and torpid capillary circulation of the back of the hands. This may be regarded as a pathognomonic symptom, and need not be confounded with the blue cold hand of heart disease nor that of chronic dyspepsia. It is associated with depressed emotions, indecision, mental debility, and hallucinations, and, in some cases, terminating in tabes. This sad condition comes on with the impotency which results from the inordinate emissions, and may properly be regarded as the second or cerebral stage of erotism, in which all the phenomena of the disease are in the cerebro-senso motory organism, whilst, nevertheless, the actual lesion is in the reproductive-organism, and in the male may most likely be found to be a congestion of the vesiculæ seminales, resulting from indirect debility, and tending to atrophy and sterility.

From among the many such instances on his office case book he cited that of a talented youth recently admitted with much promise, to the bar. "Oh, doctor!" he exclaimed, in a feeble and tremulous tone, "I'm unfit for business! I'm going crazy! Everything agitates me, and the future is dark and foreboding!" Here, associated with muscular tremors, relaxed, refluent pulse, anorexia, wakefulness, rest-

less eyeballs, Dr. D. noticed the characteristic *cold, damp, purplish-red hands, with the torpid capillary circulation.*

This marked symptom diagnoses the verge of erotic mania which was confirmed by a confession of an extreme practice of masturbation, which was now followed by a total absence of erections and emissions.

The cerebral symptoms Dr. D. disregarded, as shadowy consequences of the substantial disease of the genital system.

The sole indication, therefore, was restoration of the reproductive organism from its state of indirect debility. The suggested means were chalybeates, bromide of potassium, and a diet of oysters and such like phosphoric food.

The benefit of this treatment was soon manifest, and in a few weeks he was restored to health and business. In regard to the bromide of potassium, Dr. D. remarked that his attention had been called to this agent by Dr. James Durrach, who had successfully used it in a similar case, and who refers the primary use of the article in genital complaints to Trousseau.

Regarding bromide of potassium as a specific tonic to both the male and female organs of generation, Dr. D. has, for sometime, and in many cases, administered it successfully in too partial and too abundant menstruation, in leucorrhea, and in various degrees of the indirect debility above noticed of the male organs of reproduction.

As regards the use of phosphoric diet, its efficiency is not only supported by many cases in his own practice, but by the successful practice of the dry phosphoric acid in the practice of his friend, Dr. Frické, and by the testimony of Dr. ——, that a husband and wife who were without issue for several years, eat daily of the head of the boiled rock fish, in accordance with medical advice, and conception, full gestation, and a safe birth followed, and in due time occurred a second birth. How far the bromide of potassium may be an important adjuvant, is left for future practice to determine. The formula which he has always used is :

℞ Bromide Potass. ℈ ij.
Aq. Cinnam., f ʒ ij.
M. ʒ i. q. t. h.

Taken on the empty stomach, an hour before ordinary meal time, and at bed time.

In view of the above remarks he would, in conclusion, say that in puerperal insanity the uterine treatment, respectfully suggested, is intended as an addition to, and not a substitute for the cerebral treatment. At the same time, in respect to this, it may be well to question the benefit of the antiphlogistic treatment, and, if indeed, revulsives of a proper kind to the feet and the use of valerian would not be more efficient. In one case, in his practice, with the advice, in consultation of Dr. Meigs, it was, after various vain efforts, the finally successful treatment. The strong infusion of valerian was administered in the fluid citrate of potassa, every two hours. After two days' use the patient, who for days had contracted an aversion to her best friends, imagined each coming inspiration to be her last, and imperatively taxed her nurse day and night to constantly fan her, was restored to sleep and appetite and normal emotions and mind.

Another concluding remark. If, said he, the genital system be a cause of insanity, so is the liver and stomach. In regard to the liver, the term melancholia shows that the ancients were well aware of an abdominal origin of disordered mind. And in respect to the stomach the cases are numerous. Among those in his practice was that of an intelligent lady, whose life consists of alternate periods of extreme dyspepsia and destructive insanity. Whilst under the cerebral form of her disease, the stomach is healthy; she feeds with appetite, sleeps, and accumulates flesh; but when the mind is right, she becomes a miserable dyspeptic and emaciates.

Here, then, he remarks, are presented puerperal, erotic, gastric, and hepatic causes of insanity, which may be considered as species under the genus, reflexinsanity.

(*To be continued.*)

Therapeutics.

Chlorate of Potash.—Dr. E. J. Fountain of Davenport, Iowa, thus sums up the virtues of Chlorate of Potash: "Believing it to be a *tonic*, *alterative* and *blood depurant*, superior, in many respects, to anything in our materia medica, I do not hesitate again to urge its claims upon the attention of the profession. From the time when, in 1851, I discovered its utility as a remedy for mercurial ptyalism, I have been testing its properties in many directions, and with constantly increasing confidence in its virtues, and (in the language of Dr. Hutchinson) "its scarcely less than wonderful power." I believe there is no tonic and alterative comparable to it in all manner of scrofulous diseases, and every form of tuberculosis, in the sequelæ of the exanthemata, in adynamic fevers, and asthenic types of disease with depressed vital powers, in every condition involving an imperfect æration of the blood, and many derangements of the system resulting in abscesses, eruptions, ulcers, &c. In my opinion it has this wide range in its application by reason of its *oxydizing* properties." He gives it in the form of a saturated solution, wineglassful at a dose, from one to four times daily, after meals.—*Am. Med. Monthly and N. Y. Review.*

Quinine as a Parturifacient.—In the *Lancet and Observer*, for December, is a paper by Dr. John Lewis, in which quinine, in ten grain doses, is recommended as a parturifacient

He says, "The facts above detailed have occurred so often in my practice during the past ten years, that when I find a patient in labor with a rigid os uteri, a tense pulse and dry skin, I always give quinine *freely*, use dry cups over the sacrum, and the warm foot-baths, and expect the os uteri to relax, the pulse and skin to soften, the uterine contractions to increase in frequency and force, as surely and certainly as I would nausea to follow the exhi-

bition of ipecacuanha, or purging from jalap. I look upon the result as a *pro hoc*—look for it with as much confidence as I would convalescence from anæmia or erysipelas, *after* ths exhibition of the chalybeates." He says further, "in my experience, it (quinine) proves itself to be a better parturifacient than any of the agents belonging to that class." —*Ibid.*

Belladonna in Enuresis.—Dr. D. D. Slade in *Boston Med. and Surg. Journal*, says, "In our own practice, we have met with signal success in the treatment of enuresis in children, by the use of belladonna; and lately we have the results of a series of carefully conducted observations upon this affection, by Dr. Hewson, of New York, which are at once conclusive and satisfactory. Dr. Hewson's observations embraced *sixty-three* cases, and he regarded belladonna as almost specific."—*Ibid.*

Ice-Water in the treatment of Croup.—Dr. J. A. McFarland of Tiffin, Ohio, in speaking of this treatment in at least two hundred cases, says, "For my own part I can truly say, if I were confined to a single article in the treatment of tracheitis, I would prefer cold water to all others. By its judicious employment, commencing before the formation of false membrane, there will be little or no danger of a fatal termination. Even when diphtheritic formations have commenced, there is no surer way of arresting their progress.

It is neither necessary nor proper, however, to confine ourselves exclusively to a single remedy. Whilst, in severe cases, our reliance is mainly on ice water, recourse is had, as occasion requires, to ipecac, and alum, as emetics; enemata, castor oil, or calomel to evacute the bowels; the warm bath, anodynes, and solution of nitrat argenti.

* * * * * *

In applying the remedy under consideration, we use folds of muslin or linen, large enough to cover the whole throat and upper part of the sternum. The wet cloth, wrung just enough to prevent dripping, ought to be well

covered with several thicknesses of dry flannel, and then both should be secured with a small handkerchief.

When we wish to have the applications very cold, it is best to have two wet cloths, using them alternately, as fast as they become warm. This course should be continued till the disease is thoroughly subdued. When treatment is commenced early, a few hours may suffice; in neglected cases, several days are sometimes required.

In some cases, water fresh from the well or cistern will be sufficiently cold; but as a general rule, the preference should be given to ice-water.

On the Therapeutical Method of preventing Pitting of the Face in Confluent Smallpox.—During the last five years Dr. Stokes has employed gutta percha and collodion in a considerable number of cases of confluent smallpox, for the purpose of preventing pitting of the face. In most of the cases the crust came off in large flakes or patches, composed of the dried exudations and the covering material, leaving the skin uninjured. This kind of treatment was most adapted to those presenting a more sthenic type. Dr. Stokes considers that the application of poultices over the face is the surest method of preventing disfigurement in smallpox. Their use should be commenced at the earliest period, and continued to an advanced stage of the disease. In most cases they may be applied even over the nose, so as to cover the nostrils. The plan should fulfil three important indications of treatment—namely, to exclude air, to moderate the local irritation, and to keep the parts in a permanently moist state, so as to prevent the drying and hardening of the scabs. The best poultice is formed of linseed meal, which should be spread on a soft material, such as French wadding, and covered with gutta percha paper or oiled silk. The conclusions to which Dr. Stokes arrives are the following: 1. That the chances of marking are much greater in the sthenic or inflammatory than in the asthenic or typhoid confluent smallpox. 2. That, considering the change in the character of disease observed during late years, we may explain the

greater frequency of marking in former times. 3. That in the typhoid forms of the disease the treatment of the surface by an artificial covering, such as gutta percha or glycerin, will often prove satisfactory. 4. That in the more active or non-typhoid forms the use of constant poulticing, and of every other method which will lesson local inflammation, seems to be the best mode of preventing disfigurement of the face.—*Dub. Quar. Journ. Med. Sci.*

Chloroform.—In the *Med. and Surgical Reporter*, for December 22, Prof. Gross' clinical remarks upon chloroform are quoted. He "has used chloroform for more than ten years, without ever having seen any accident resulting from it. He prefers it to ether, as the anæsthetic influence is more rapidly produced, and more easily maintained by it; as it causes less bronchial irritation, and is less liable to produce vomiting, or other unpleasant effects. In order to use chloroform with impunity, it is indispensable to observe the following rules: 1. The patients stomach should be empty. 2. The patient should be kept in the recumbent position. 3. There should be no constriction of the chest and abdomen from clothes. 4. An abundance of fresh air should be allowed to admix with the chloroform. 6. The inhalation should be effected gradually. And 6. Care should be taken that the article used be perfectly pure."—*Ibid.*

Burns.—Mr. Henry, a British surgeon, recommends the permanganate of Potash as a superior dressing for suppurating sores, particularly suppurating burns. Dr. Rittenhouse of Pennsylvania, says the best application to suppurating burns he has ever tried, is one part of powdered rhubarb, mixed with two parts lard, and applied on linen cloths. Prof. Richardson, of New Orleans, recommends sub-nitrate of bismuth and glycerin to be rubbed together in a mortar to the consistence of paste, or thick paint, and apply with camel's hair brush or mop of soft rag: cover with carded cotton, and, if necessary, retain with loose bondage. Dr. Butler, used simple *putty*, pressed out into a thin sheet, as a

dressing to burns, with benefit.—*Cincinnati Lancet and Observer.*

Fat as an antidote to Poisoning by Arsenic.—A small quantity of fat, as of milk, meat &c., will reduce the solubility of arsenious acid to about one-twentieth of what ordinarily belongs to it, according to Dr. Blondlot. Hence, fat swallowed immediately after arsenic will hold it nearly or quite harmless until radical means can be adopted to evacuate the stomach. If this is true, it has immense practical value.—*Ibid.*

Oxalate of Cerium.—Dr. Lee, of Blockley Hospital, Philadelphia, confirms Prof. Sampson's statements of the value of oxalate of cerium in obstinate vomiting of advanced pregnacy; and has likewise obtained great good from it in the emesis of tuberculosis, and in pyrosis and hysterical vomiting. He credits it with valuable tonic properties, and has given it with marked benefit in atonic dyspepsia. He gave it in doses of one or two grains in pill every two or three hours.—*Ibid.*

Oxgde of Bismuth in Gleet, &c.—Repeated trials have convinced Dr. Gaby, of Paris, that injections of oxyde of bismuth constitute the very best treatment of gleety discharges. Thirty parts are suspended in two hundred of rose water and so injected as to leave as large a deposit as possible of the salt in the canal. Three injections per day should be employed at first, and then fewer. Urethral discharges, unconnected with gonorrhœa, as observed in a certain diatheses, in masturbation, veneral excesses etc., have been successfully treated in this manner. Balanitis, balanoposthitis, and herpes preputialis yield rapidly to bismuth applied in powder, after cleansing the part and then covering with cotton. The various forms of vulvar leucorrhœa may be treated with the same agent: after removing the complications, the bismuth acts upon the discharge like a specific. But it is to be remembered that this remedy is only adapted to chronic cases; pain and other signs of acute inflammation contra-indicate its employment.—*North Amer. Med. Reporter.*

Reviews and Editorial.

We have received, from the author we presume, an introductory address to the Medical Class at St. Louis, entitled "Medicine for the Million," by M. L. Linton, M. D. The lecturer shows that he possesses a bright and thoughtful mind and a heart full of humanity. Many might suppose the style was too easy—flippant perhaps—for an introductory lecture to a class of young men about to enter upon so grave and severe a study as that of medicine, and better suited to the popular ear and apprehension of the million. We do not think so. The study of medicine is dry enough to all beginners, without frightening them *en limine* with the idea that the course is so toilsome and fatiguing, it will be useless to undertake it in earnest. Many are thus prevented from studying as much as they would otherwise, and finally resort to that abominable system, so fashionable of late years in and around our Medical Schools, of cramming on the part of teachers, and mechanically memorizing on the part of pupils. We remember a bright and noble fellow, who was sadly discouraged by listening attentively to one of those dreadful introductory lectures which represent the study of Medicine as severe beyond measure and laborious in the extreme. The lecturer trimmed the midnight lamp every few sentences and employed the intervening ones to pile up volume upon volume, Pelion upon Ossa high, that must not only be read, but diligently studied and inwardly digested, until the poor fellow's heart failed him. He said he would return home and try some other pursuit in life. He felt assured the study of medicine was too much for him. He would have to read as many musty volumes as were in the Bodlean library, and study books enough to fill a room twenty feet square before he could claim to be a Doctor. He was in earnest, actually

got ready to leave Philadelphia, and it was after much persuasion he consented to stay and try it a while. He was beyond all question one of the first men in the class. But let us return to our mutton, as the French say, and give the reader a morceau that he may judge of its quality for himself.

"Hope is one of the best articles in the moral materia medica, and is accessible to almost everybody. It seldom yields to despair. When Pandora opened the precious box of heaven's gifts to man, all its contents evaporated save only hope, which remained to charm and cheer the world. Benevolence—good-will to mankind—is conducive to health. The angels' song was "peace on earth to men of good will." Charity, the satisfaction of duty performed, and contentment, contribute to health and longevity. A reasonable and calm survey of the world is a potent check on the base, depressing disease-producing passions. The philosophers—such as Socrates, Plato, or Seneca—estimate things about as they deserve. Wealth and the world's applause are well enough, but they are very precarious; and then life is so short. When men acquire them, the startling idea obtrudes itself that their enjoyment is transient. Not be thus, suffices—"but to be safely thus." Though it is human nature to desire these things, they are hardly worth breaking our necks for. They rarely pay the toil and anxiety occasioned by their pursuit. They are like Dr. Johnson's show, "worth seeing, but hardly worth going to see."

We all seek happiness in some way or other.

> "Some place that bliss in action, some in ease;
> Those call it pleasure, and contentment these."

I should place it in a reasonable combination of the two—reasonable effort to acquire the good things of the world, and contentment with one's lot. If we but knew the annoyances, the troubles, the vexations, of those who rank above us in the social scale, we should envy them less: they have but exchanged the quiet valley for the stormy mountain height. You will find more contented-looking and happy faces amongst a group of laborers taking their frugal meal under the shadow of a wall, than amongst the merchant princes on 'change. Thank God the blind beggar can dance and the cripple sing! and that the world's great majority—the poor—are as happy, to say the least, as the minority. They have more courage, too, than the children of fortune, and they bear the ills of life with less whining and repining. Often I have looked on their calm, heroic faces in adversity and suffering, and thought that they were surely the favorites of heaven. They exhibited what, were I going to write about it, I would term latent sublimity; more pleasing, doubtless, to God and

good angels than the public benefactions and sacrifices chanted by poets and panegyrized by orators.

Think you that you would be happy with ten thousand dollars more? You would want a hundred thousand worse than you did the ten. Had you millions, you would set up for an aristocrat, and have servants in livery. Were you a duke, you would sigh that you were not a prince or king; if a king, that you were not an emperor. If Napoleon, you would be discontented that your empire was not as large as that of Russia. If you owned the world, you would fall out with Prof. Mitchell and the other astronomers for telling you how very small it is compared with some other worlds. Before you had gone so far in this, however, ten chances to one you would commit suicide because you had been so successful.

To covet, to envy, to hate, is base, unreasonable, unwholesome. The man who has insulted you is probably sorry for it, but has not the courage to ask your pardon; the slight which made you sleepless may have been unintentional; the evil which you apprehended is nearly always imaginary; if you have led an honest life and paid your debts, the shafts of slander will fall harmless at your feet. Even if your record is not immaculate, despair not; do better for the future. The loss of a part is no reason why all should be thrown away. If a man has done badly all his life, it is no reason why he should not put the best foot foremost even in walking from the prison to the gallows."

* * * * * * * * * *

"Then there is the hypochondriac, moping about because he has not a good appetite. He sighs over a sour stomach—feels his own pulse—notes every feeling, and worries his friends with symptoms as numerous as St. Anthony's devils. Look up my friend! Change that old thread-bare black coat: it looks as if it had the hypo itself! Put on a jaunty frock of olive, or a "long-tail blue"—wear a better looking hat—get new boots, a handsome vest, and an unexceptionable cravat. Spruce up! Now look in the glass! Don't you feel better? If you do not, I would advise you to travel. But remember all the time, that night turns to day, winter gives way to spring, storms die in calms; and that distress and suffering, when borne with manly fortitude, are often but the harbingers of happy years to come.

How careful should we be in our intercourse with our fellow beings that we excite no unhealthful feeling! An unkind word may excite disease. I read but the other day of a young lady who died of mortified feelings, from having received an insulting valentine. The poet John Keats was killed by an article in the Edinburgh Review. Paper bullets are sometimes as fatal as leaden ones. Lawyers stand abuse and ridicule better than any other class of men; this is explained by the fact that they become gradually acclimated to it.

The sick especially need cheerful, sympathising looks. It half cures them oftentimes to know that they are cared for; and it is enough to

make any one feel sick to feel that he has no friends. When the mind is cheerful and courageous, the body more powerfully resists the causes of disease than when it is depressed and despairing."

We are under obligations to Messrs. S. S. & W. Wood, 389, Broadway, New York, through the hands of W. L. Pomeroy, Esq., of this city, for Bodenhamer on the Congenital Malformations of the Rectum and Anus, Camplin on Diabetes, Lyons hand-Book of hospital practice, and for extensive catalogues of Medical, Scientific and other Books. Bodenhamer on the Congenital Malformations of the Rectum and Anus is the most complete work of the kind that has ever been published. It is handsomely printed, with clear type, on good paper, well illustrated by plates and exemplified by cases, and presents a complete and accurate exposition of the Malformations of the Rectum and Anus, their etiology, pathology classification and treatment. There is no such work to be found in this or any other country, and the author deserves the thanks of the profession for the painstaking and labor which he has successfully employed in collecting together and putting into practical form the Medical literature upon the subject. It ought to be in the library of every practitioner of Medicine.

Camplin on Diabetes professes to teach a successful method of treating this obstinate and troublesome disease. It consists chiefly in putting the patient on Bran Bread. The Bran should be ground so fine that it will not operate on the bowels; while the principle of cure consists in furnishing the patient with a wholesome article of diet in which there is no starch or gluten to be converted into Sugar. It is reprinted from volume xxxviii of the Medico-chirurgical transactions, published by the Royal Medical and Chirurgical Society of London.

The Hand-Book is intended specially as a guide to students in prosecuting their studies and researches in hospital practice. But it will also be found useful in many respects to those young practitioners who are chiefly engaged in country practice.

Baillière Brothers, 440 Broadway, New York, have sent us a work on Diphtheria, by Edward Headlam Greenhow, M. D. which they have just published. This is a reprint from an English work, which the enterprising publishers were induced to bring out from the prevalence at this time of Diphtheria in this country, and the daily demand for a recent and practical treatise on this disease. The author is considered one of the ablest English writers on epidemic diseases, and this work is founded partly upon the study of Diphtheria in private and public practice, partly upon information obtained in the course of an inquiry into the causes, symptoms and treatment of this disease made for the Privy Council in 1859, and from eminent practitioners throughout the country, who had been most extensively engaged in its treatment. It is especially valuable as presenting us with a complete and reliable English view of the nature and treatment of Diphtheria. The price of this little volume is one dollar and twenty-five cents.

While upon this subject, we call the attention of the reader to the fact, that we have published in this number of the Journal, notwithstanding it presents some extreme views, with which we do not entirely coincide, a well written and maturely considered article on Diphtheria, by R. R. Livingston, M. D. of Plattsmouth, Nebraska Territory. The observations of this writer led him to arrange the cases of Diphtheria which he witnessed and treated under two heads, viz: *Sthenic* and *Asthenic;* and his experience justified him, in treating what he considered the *Sthenic* form of the disease, in the bold use occasionally of the lancet, "always opening a large orifice and obtaining a full stream." Whether the external conditions of this country have so far influenced the morbid manifestations of the human constitution, as to cause Diphtheria to present a more *Sthenic* character in Nebraska Territory than it has done in the more eastern and Atlantic States, and on the continent of Europe, we will not undertake to determine. But the questions are settled beyond all controversy, by the concurrent testimony of the profession in

this country and in Europe, that Diphtheria must be placed in the category of *blood diseases*, and that it must be considered essentially *Asthenic* in its character.

The American Journal of Medical Sciences for January, publishes the prize essay of Dr. Slade, of Boston, on Diphtheria, to which the Fiske Fund Prize for 1860, was awarded. We are sorry that the extreme length of this learned and finished production forbids our transferring it to our pages. We must content ourselves with giving the conclusions at which the able essayist arrives. The author, first of all, gives Bretonneau's description of the disease, and then compares it with the various epidemics that have prevailed at different times in Europe and America; carefully points out the distinctive characteristics of Diphtheria and Croup and Scarlet fever; and with much pains and at considerable length, discusses its pathology, and the question of its infectious nature. He comments upon the presence of albumen in the urine, and attaches considerable importance to a knowledge of this tact; and finally comes to the following conclusions:

"1. Diphtheria is a specific disease. This fact is shown by its origin, its progress, its manner of termination, and its sequelæ. 2. Its diagnostic sign is the formation of an aplastic membranous exudation upon any portion of the cutaneous or mucous surfaces, which is exposed to the contact of the atmosphere. 2. It is propagated by infection and contagion and is both epidemic and sporadic in its invasion. 4. Its characters plainly indicate that it belongs to the category of *blood diseases*. It is not allied either to cynanche trachealis or scarlatina. 6. The treatment is to be directed to the control of the exudation, and to the support of the constitution by means of tonics, stimulants and nutritious diet."

The author thinks, as we have no specific remedy capable of arresting this disease, that our main duty consists in *conducting* the patient safely through it; and as the principal indication is to support the powers of life from the first, neither leeching, or other local bleeding or even purging should be thought of, excepting in very rare instances. Stimulants, tonics and nourishment should be employed early and

steadily persisted in. Among the tonics for internal administration, quinine, iron and chlorate of potash are held in highest estimation; and the tincture of the sesqui-chloride of iron seems to be preferred by a majority of practitioners. It is to be given in doses of from ten to twenty drops every three or four hours.

The local applications that seem to merit special confidence are, nitrate of silver in solution, thirty to sixty grains to the ounce of water, muriated tincture of iron, and hydrochloric acid. They may be applied with a sponge probang, and in the cases of children with the camel's hair pencil. Gargles of chlorate of potash alone, or in combination with hydrochloric acid, or the tincture of sesqui-chloride of iron, and also of tannin, salt, &c., have been found beneficial. If all else fail, the author thinks, when the larynx and trachea are invaded by the exudation, that the operation of tracheotomy ought to be performed.

This admirable essay concludes with an account of the treatment recommended by many of the principal European practitioners.

Dr. James H. Dickson, of Wilmington, this State, has sent us his report on the Medical Topography and Epidemics of North Carolina, extracted from the transactions of the American Medical Association, and printed in pamphlet form by Collins, 795 Jayne Street, Philadelphia. The Doctor's fine literary taste, cultivation and professional learning eminently fitted him for this task; and it is a proper subject of regret that the reports, which he was able to procure from different portions of the State, were so meagre and imperfect. Our physicians have not paid sufficient attention to the important work of recording in the transactions of our Medical Society, and in the Medical Journals of the country, their observations and experience as to the nature and treatment of diseases. Had they done so, this report doubtless would have been more complete and satis-

factory. It is to be hoped that our Medical men will be stimulated in future to write more than they do, and to publish what they write.

We transfer to our pages the Reporter's remarks on Bilious Remittent Fever, which he denominates the great endemic of Southern climates, and which unquestionably is the *Morbus Regionalis* of the entire eastern section of our State.

BILIOUS REMITTENT FEVER.

For many years, it may be said to have been the reigning epidemic of the entire eastern section of the State, of such uniform occurrence in the summer and fall, and so formidable in its character, that few who had the ability to remove to more salubrious localities, were accustomed to remain during the season of its prevalence, in the low country.

This form of fever, so unfailing in its periodical visitations, often beginning as early as June and remaining until the occurrence of frost, which generally takes place in the latter part of October, has of late years, lost much of its malignity in the low country, but seems to have acquired an increased power of diffusion, having gradually encroached upon the middle region of the State, and extended itself almost to the base of the Blue Ridge Mountains.

A few years ago the remittent and intermittent forms of fever were as prevalent in Salisbury, Concord, and Charlotte, in the middle reigion of the State, as in any of the counties on the seaboard.

I am informed by physicians resident in the mountains, that these forms of fever are never known to originate there, but are not unfrequently inported by travelers, and that the mountaineers look upon a journey to Charlotte or Salisbury in autumn, with much the same feeling of apprehensions with which an inhabitant of either of these towns would regard a visit to Wilmington, or Washington, on the seaboard.

For some years past, remittent fever, as it has prevailed in the eastern or seaboard counties of the State, has been almost uniformly of a mild type; very rarely presenting the severe gastric derangements which constituted such troublesome and dangerous complications in former years.

Thirty years ago, this form of fever was frequently attended with a duodenitis which extending along the hepatic ducts and their ramifications, caused such a suspension of the functions of the liver as to lead to the retention of the elements of biliary secretion in the blood and gave to the skin that icteric hue which allied it closely, both in the popular and professional mind, with the yellow fever of the tropics.

As experience has taught us that quinine is entitled to the rank of the febrifuge *par excellence* in this form of fever, we have been able, of late years, to dispense with much of what formerly constituted the regular *armamentarium medicorum* in its treatment.

We have now but little use for sudorifics, effervescing draughts, cold affusion, or the lancet, and the disease is rarely suffered to run on long enough to give rise to organic complications.

In cases of much severity, or in which alarming indications present themselves, the abortive method of treatment by the rapid induction of a state of cinchonism has become a favorite plan of proceeding.

It has rarely been found necessary in this locality (Wilmington) however, in order to produce this effect, to resort to the very large doses of the drug which have been recently recommended in our medical periodicals and practised in other parts of the State. In the vast majority of cases which occur here, the system may be brought sufficiently under its influence by doses of from two to five grains every hour or two, until the muffled ear gives token of its peculiar influence upon the nervous system and the reduction of the excited pulse exhibits its influence on the vascular system.

One class of cases in which it is very desirable if not indispensable to bring the system very speedily under the influence of quinine is that which occurs in children attended with convulsions (*Febris Remittens Convulsiva.*) In this class of cases the first and sometimes the second paroxysm of fever may be unattended with the appearance of any alarming symptoms, but the third paroxysm is apt to be ushered in with a convulsion which seems to replace the cold stage of the same disease in adults, and which is always so alarming and dangerous an occurrence, as to make it prudent to cut short the disease at once by bringing the system very rapidly under the potent influence of the febrifuge.

For the very valuable suggestion upon which this practice is founded we are indebted to Dr. Henry F. Campbell, of Georgia. Detecting the fact that the convulsion was but a chill in disguise, and therefore liable like the chill to a periodical recurrence, he has put us on our guard and enabled us to ward off an imminent danger. I feel assured that by acting in accordance with this precept I have been enabled in a very large number of instances, to divest this form of fever of its danger.

Although quinine has the power of arresting the progress of every variety of remittent fever, even after local inflammations and congestions have been superinduced, still its salutary operation is greatly obstructed by such occurrences, In cases which will admit of delay, these local derangements should be relieved by the use of such local and general remedies, as may be indicated by the special complication; but in formidable cases, we should not hesitate to give it concurrently with those remedies.

The ordinary cerebral and lumbar pains, which inevitably accompany remittent fever, do not contraindicate its use. On the contrary, they are speedily relieved by it, and in many cases without the use of those *adjuvantia* which are commonly prescribed for their relief. When, however, these symptoms are more than usually violent, or unusually persistent, no prudent practitioner would neglect the use of ancillary measures.

Where there are evident symptoms of gastritis, as indicated by extreme irritability of stomach, especially when accompanied with vomiting of a *glairy white-of-egg-like* fluid, local depletion, a blister to the epigastrium and ice ad libitum will be found useful preparatory or co-operative measures.

The symptomatology and pathology of this form of fever so plainly point to the liver as an organ which bears in a large degree the onus of the malady, as to make it important that we should not overlook or neglect the remedies which experience has furnished us with for the purpose of rectifying its disordered functions.

The essential anatomical condition of this form of fever would seem to be, according to the views of Drs. Swett, Stewardson, and Howard, confirmed by the industrious and careful microscopic examination of Dr. Joseph Jones, of Georgia, to be that condition of the liver which they have designated by the term bronzed liver.

Dr. Jones, in his very elaborate and learned paper on Malarial Fever, published in the twelfth vol. of the Trans. of the Amer. Med. Association, attributes this peculiar color of the liver "to changes in the coloring matter of the blood, as is indicated by the fact that the blood from capillaries of the liver will not change from the dark reddish-brown and purplish color, to the arterial hue on exposure to the air. It is probable that the altered coloring matter from the destroyed disintegrated blood corpuscles, or from the blood-corpuscles acted on by the malarial poison without actual disintegration escapes, and permeates the surrounding tissues, and imparts the peculiar color to the liver."

In the same valuable paper it is stated that the glycogenic function of this organ is also frequently impaired. Whether this derangement of function is to be regarded like the bronzed color, as characteristic of this form of fever, can only be determined by more extensive observations.

But whatever may be the precise deviation of this organ from the healthy state, experience has demonstrated the advantage of such remedies as are supposed to possess cholagogue properties, among which mercurial cathartics rank highest with the profession generally.

Though decidedly sceptical with regard to the possession of any such property by any form of mercury, I still regard it (but solely upon empirical grounds) as a very valuable medicine for rectifying disordered, hepatic functions.

I have, I think, occasionally witnessed the sad consequences of neglecting the morbid condition of this viscus and relying too exclusively on the remedial powers of quinine.

The highly inflammatory type of remittent fever is rare in this locality (Wilmington), of late, and hence the use of the lancet is seldom required in its treatment. Instead of its being the general rule to bleed now, as it may be said to have been twenty years ago, bloodletting is a rare exception to the rule.

That bleeding was an indispensable remedy in the highly phlogistic diathesis, which prevailed twenty-five years ago, no man whose experience reaches over that number of years, will be likely to deny.

Whether the human constitution has been so influenced by the external conditions to which it has of late years been subjected, as to modify its morbid manifestations; or whether the nature of the disease itself through some occult modification of its exciting causes, has undergone some change, may not be very easy to determine. But that a very decided change has come over the manifestation of the disease and the indications of treatment within the last quarter of a century, is a fact testified to us from all quarters.

While it is indisputably true, that great and notable advances have been made in the diagnosis of diseases within the period under review, and we might, therefore not unreasonably doubt the accuracy of the diagnosis of our predecessors, who depended only on the rational symptoms, and by logical inference deny the value of their experience, as to the necessity or even utility of the remedy, this would only avail so far as regards the thoracic complications of the disease; for, as a general rule, although this disease presents more or less diversity of aspect in different years, it rarely changes its phasis to such an extent as to render its diagnosis a matter of difficulty.

We are not, therefore, warranted in condemning the practice or in ignoring the experience of the age which has just preceded us; nor in pluming ourselves on any demonstrated superiority in practice. Another cycle of twenty or thirty years may lead our successors to wonder at what they may have good reason to regard as our weak and inefficient *methodus medendi*.

That the type of disease varies from year to year, or within a series of years, is a proposition which has received the very general assent of the profession since the days of Sydenham; and although we may regard his ascription of it to some occult atmospheric constitution, as but a hypothetical solution of the problem, it will not be wise to disregard the great amount of observation and experience which has since been accumulated upon this point, and to conclude that because bloodletting does nos *now* seem to be a *sine qua non* in the treatment of inflammatory disorders, that it never has been entitled to be so regarded.

Extreme opinions on medical, as on many other subjects, rarely stand the test of time and experience, and though the aphoristic words of Hippocrates, "*experientia fallax judicium difficile,*" embodies a desponding truth, experience must, I presume, still be regarded, as the great arbiter both of opinion and practice."

We are indebted to the superintendent of the Insane Asylum of North Carolina, Dr. Edward C. Fisher, for the reports of the president and directors and superintendent of that Institution for the years ending the first of November 1859 and 1860. These reports, as a general thing, present the usual features and characteristics belonging to such documents. We were sorry to learn, however, from the special report of the Superintendent that there had prevailed during the past year an epidemic form of Dysentery of a fearfully violent character among the inmates of this establishment, commencing in the Spring and continuing "through the summer and a portion of the fall months."

The superintendent speaks in the highest terms of the faithfulness of the employees of this institution during this visitation; while it is certain that he fully recognized the importance and responsibility of his own trying position.

Speaking of the cause of this epidemic the report says:

"Of the probable existing cause of this malady, there is little doubt but that it was to be found in that peculiar condition of the atmosphere favorable to its development. The surrounding country shared in the like tendency; and although the disease was not of so grave a type, yet so general and decided were the characteristic symptoms, as to be justly regarded as epidemic dysentery."

The Superintendent in alluding to the number and character of the patients received into this Asylum during the past year, gives us the gratifying information contained in the following extract, which not only clearly proves the importance of this institution to the state, but also the great necessity of early attention to cases of Insanity. Too much weight cannot be given to this view of the subject; and we would remark further, that not enough attention is pai

our Medical Schools to teaching the proper nature and right treatment of Insanity.

Of the admissions during the year, numbering fifty males and twenty-six females, and making a total of seventy-six, the far greater portion have been as heretofore, chronic, or cases of long standing. This contribution to those already in the house, continues to keep up a large number; and as the constitutional energies of many of them have been materially impaired by complications of physical and mental disease, will of necessity, continue to swell the annual list of mortality in a considerable degree.

The proportion of recoveries during the same time, to the number of admissions, has been twenty-eight per cent, while that of recoveries, to the recent cases in the same time, has been seventy-three per cent.

In this latter result, is strikingly illustrated the beneficial efiects of subjecting the insane to early treatment.

We have copied from the London Lancet, an article by Dr. Wardell, on Enteric fever, in the hope that the subject will prove of some interest to our professional brethren generally in this State. Fevers of the continued type, the symptoms being displayed chiefly through the stomach and intestinal canal, are obviously increasing in our country; they also partake more and more of the asthenic character, and are attended more frequently by fatal results than formerly. What this is owing to, we will not pretend to determine; because we believe that the causes which have influenced it do not, in the present imperfect state of our knowledge of ætiology, admit of any satisfactory explanation. Having observed the disease developed in the most opposite states apparently of the animal economy, under the most dissimilar conditions of rank, age, sex and diet, we cannot resist the conviction, that the causes ordinarily assigned for it by authors are in a great degree imaginary. What amount of influence the electrical condition of the earth's surface, and superincumbent atmosphere exercises in determining this question, the actual state of our knowledge does not enable us precisely to estimate. But observation, and the records of science, and our own personal

experience, sufficiently demonstrate that electrical phenomena, and the changed relations between the electrical condition of the atmosphere and that of the individual, are closely allied with the amount of health enjoyed, and with the development of disease in the human constitution.

Subscribers.

We sent the January number of the Journal to all those whose names we found on the mail-book; and we shall do the same thing in regard to this, the March number, excepting where the Journal has been returned to us. In those cases the names have been stricken from the list.

We again call upon every one who gets this number of the Journal, and who has received the January issue, or whether the latter has been received or not, to come forward and pay up his subscription, if he desires to continue to take the work. In cases where the Journal is received, and the persons receiving it do not intend to continue to take it as subscribers, they should feel bound by every honorable consideration to return it, unless it is marked on the cover complimentary. Failure to get the first number, where the second is received, has been the fault of the mails, for we shall send the March number to those only to whom we sent the one for January. Should any one get the March issue, who had not gotten the one for January, and desires to continue his subscription, we will endeavor to supply him with the latter upon his sending us the subscription money.

We are determined to find out who are the subscribers to the North Carolina Medical Journal, if it is possible for us to do so. We distributed at least four hundred copies of the January number; about thirty or forty persons promptly returned it; and the names of all those who have paid up for the current volume will be found under the proper head. We shall, in each succeeding number, regularly publish the names of those who pay up their subscriptions.

ERRATA.

It is due to Dr. Manson, to state that he did not have the opportunity of correcting the proof sheets of his articles, and we therefore, insert the following as furnished by himself:

ERRATA IN DR. MANSON'S ARTICLE, NO. I.

On page 6, for "dead *medicine*," read "dead *matter*."
" 8, for "Homer should *have* waked up *where* he nods," read, "Homer should *have been* waked up *when* he nods."
On page 8, on last line for "*with*," read "*wit*."
" 9, on last line, for "might *have* placed," read "might *have been* placed.
On page 12, and other places, for "*Elberle*," read "*Eberle*."
" 12, for "*Larcone*," read "*Sarcone*."
" 13, for "Head *Pluriay*," read "Head *Pleurisy*."
" 27, for "distinctness of the cold stage,," read, "indistinctness of the cold stage."
On page 27, on 10th line from bottom, for "*his* form of pneumonia," read, "*this* form of pneumonia."
On page 30. for "Malliot," read "Maillot."
" 30, for "Grissolle," read "Grisolle,"
" 33, for "retracted," read "retreated."

ERRATA IN DR. MANSON'S ARTICLE IN NO. II.

On page 113, 16th line, for "the symptoms" read "these symptoms."
On page 114, 29th line, for "Bouilland" read "Bouillaud."
" " " 31st " " "Pneumenia" " "Pneumonia."
" " 115, 4th " " "accruing" " "occurring"
" " 118, 29th " "Simple Bilious Pneumonia" for Simple and Bilious Pneumonia."
On page 121, 4th line, for "Pneumonia Bilieuse" read "Pneumonie Bilieuse."
On page 125, 24th line, "Malaria Pneumonia" read "Malarial Pneumonia."
On page 126, Add (To be Continued.)

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Original Communications.

A Reply to Dr. W. T. Howard's Review of the "Essay on Malarial Pneumonia," which appeared in the Transactions of the Medical Society of North Carolina.

BY OTIS FREDERIC MANSON, M.D. MEMBER OF THE MED. SOC. OF N. C.

(*Continued.*)

THE FEBRILE ACTION IN SIMPLE PNEUMONIA.

With a view, obviously, of lessening the force of our observations on the differential characters of the febrile action in Simple and Malarial Pneumonia, and in opposition to the opinion that we have announced, that in the fever of the Idiopathic form, "a marked paroxysmal character is *seldom* or never observed," our reviewer, although admitting that "the paroxysmal and periodical recurrence of the febrile movement is undoubtedly the *leading distinguishing characteristic* of pneumonia, impressed by a malarious influence," still declares that "it is highly important to remember that in simple, uncomplicated pneumonia, as well as *all* other febrile affections there is almost always a *marked* tendency towards increase of fever in the afternoon, succeeded by as obvious a tendency to its abatement during the following morning, and that he "has *not unfrequently* seen cases of pneumonia, during his residence in *this section*,

in which the *strictest scrutiny* failed to elicit *any positive* and *reliable* evidence of a malarious complication and yet, nevertheless, the fever was *decidedly* remittent and *paroxysmal.*" Discarding the observations of our critic in support of this opinion, not strictly germane to the subject, let us examine the authorities and facts upon which he relies to support these views. We quote them in the same order and in his own words:

1. *Wood.* "In his description of Simple frank pneumonia, Wood distinctly states that the fever often has a remittent character, excerbations occurring daily for the most part towards evening."

It is true, as our reviewer states, that this writer asserts that in "Common or Lobar Pneumonia," that the fever often has a remittent character with daily evening exacerbations "accompanied with *increase* of pain, cough, dyspnœa and bloody expectoration," but we are far from being satisfied that this author however high may be the position which he occupies has not drawn the feature from the observation of malarial cases. Perhaps, like one at least equally as eminent in his position and in his productions, he may have mistaken an idiopathic for a symptomatic form of pneumonia. In the hospitals of Philadelphia from which doubtless, Dr. Wood has principally drawn the materials of his work, we have reason to believe that a vast number of cases of malarial disease are annually admitted, and it is therefore highly probable that the "*malarial law,*" of which, our critic so flippantly speaks, often asserts its sway over the subjects in those institutions. Dr. Watson, the eminent authority to whom we alluded in this connection, has the following remarks: "All that I have hitherto been saying relates to acute pneumonia occuring in a previously healthy subject. But Pneumonia having that character and so occurring, is a much *less common* disorder than *most persons appear* to *suppose* and than *I formerly thought* it to be. I have been surprised to find how *few* cases of *pure idiopathic* inflammation of the lungs present themselves among my

hospital patients. *Five or six* in the year are as many as I see there."* If this be the result of the matured and extensive experience of one whose observations were made in one of the largest hospitals of London, a locality usually supposed to be one of the most favorable for the occurrence of Simple Acute pneumonia,† we should reasonably suppose that Dr. Wood would meet with still fewer cases of that form of disease. At any rate, Dr. Wood may be justly charged with palpable inconsistency of opinion, for, further on in treating of Bilious Pneumonia, he states among "the *peculiarities* derived from the *miasmatic* complication," that "the fever is always remittent, generally with daily exacerbations." Now if, as he asserts in "Common lobar pneumonia," the "fever often has a remittent character with daily exacerbations" *also*, it is a contradiction in terms to pronounce it a "*peculiarity*" at all. It is in fact, tantamount to asserting in one breath that the paroxysmal and periodical character of the febrile movement in Bilious Pneumonia is diagnostic, and in the next denying that it is diagnostic. We submit therefore, that the evidence of this witness invalidates itself and therefore should be set aside.

2. Bouchut. Our reviewer continues "In the pneumonia of *infants and children at the breast*, Bouchut directs special attention to the remittent character of the fever. He says "the *continued type* is as is known *very rare; much more frequently the fever is remittent.*" Our reviewer's quotation is correct so far as it goes, but he stops short as soon as he reaches a point which does not suit him, for Bouchut continues, "that the *remissions* appear at *irregular* intervals and occur in a very marked degree towards *night.*"‡ All this,

*Lectures on the Principles and Practice of Physic, p. 587 2nd. Am. Ed.

†"The physical climate of Britain is a sufficient explanation of its prevalence." *Williams Cyc. Pract. Med. iii*, 594.

C'est à Londres que cette affection parait avoir son *maximum de fréquence. Grisolle Traité de la pneumonie, p.* 125.

‡Traité Pratique des Maladies des Nouveaux Nes et des Enfants à la mamelle Paris 1855, p. 354.

however, occurs when the disease is advanced in its progress; for at its commencement, this author observes "the fever is almost absent," ("*la chaleur est presque nulle*") thus presenting characteristics entirely unlike those observed in simple or malarial pneumonia.

But supposing that the febrile phenomena in the pneumonia of new-born and suckling babes was identical with that observed in the pneumonias of adults, we are at a loss to know what possible connection there can be found between that disease and the subject under discussion. If we examine the works of those who have treated the subject of Infantile Pneumonia *ex professo*, we shall readily perceive that the majority of them like Bouchut had particular reference to that form of disease termed *lobular pneumonia*, concerning which there is extreme doubt as to its being in many cases a peumonia at all. It had long been observed that new-born and nursing infants were subject to a disease in many instances manifesting some of the symptoms and signs referable to the lungs, such as cough, dyspnœa, mucous and subcrepitant râles with or without percussion-dullness and others in which these indications were faintly or obscurely expressed, in whom the lungs presented post mortem appearances which were eagerly seized upon by gentlemen of the anatomical school as evidences of an inflammatory character. In these autopsies the parenchyma offered apparent congestion and induration of isolated lobules surrounded by healthy tissue, which in some cases were so numerous as to involve the larger portion of a whole lobe and affecting both lungs. For a long time these little innocents were bled, leeched, purged and antimonialized into heaven by these exclusively orthodox gentry, under the influence of the sole and indivisible idea they possessed, of its inflammatory origin, until an old German Doctor named Jörg, with none of those mystical and transcendental proclivities which our critic, in his ignorance of the vast and solid treasures which Germany has poured into the lap of science, deems them universally imbued,

bethought himself that this so-called *lobular pneumonia* might be nothing more than lungs imperfectly expanded and thereupon with a bellows blew up at once the collapsed cells and the pathologists of one idea.

Now this is the affection by Jörg termed Atelectasis which Bouchut and others before him evidently confounded with true parenchymatous inflammation, and which, according to Hasse "composes the greater number of cases occurring at the earliest period of infantine life and set down as pneumonia."[1] This is the disease or its analogue (collapse occurring *after* expansion,[2]) whose victims we too often recognize in those chicken-breasted children sinking with marasmus and hectic, now irrelevantly lugged into the discussion by our critic, to rebut the diagnostic importance of the paroxysmal and periodical febrile action in Malarial Pneumonia.

Of course we do not dispute that new-born and nursing infants may be affected with true lobular and even lobar pneumonia, but from our own observation we believe that Primary Idiopathic Pneumonia of any form, to be a very rare disease in young infants, and in this opinion we are sustained by Billard,[3] Gerhard,[4] Chomel,[5] Rilliet et Barthez[6], Swett,[7] and Bouchut[8] himself.

3. Morehead. In his *résumé* our reviewer returning to the subject says, "It is very true as we have previously stated, that in Simple, uncomplicated pneumonia the fever may be decidedly remittent and paroxysmal, and *we believe with* Morehead that there is often a *relation between* the fre-

[1] Pathological Anatomy, Syd. Soc. Ed. p. 256.

[2] First investigated by M. M. Bailley and Legendre, see West's Dis. of Children, 2d Am. ed. p. 159.

[3] Traité des Maladies Enfants Nouveau nés et à la mamelle, Paris, 1837, pp. 562, 569.

[4] Am. Journal Med. Sci. 1834, p. 97.

[5] Dictionnaire de Médecine, 2me ed. tome xxv, Paris, 1842, p. 187.

[6] Maladies des Enfans, Première partie Pneumonie, Paris, 1837, pp. 28. 76, 78.

[7] Treatise on the Diseases of the Chest, 1852, pp. 93, 94.

[8] Op. cit. p. 364.

quency of the occurrence of this type of fever and *asthenic state of the system*, but the fever is rarely as decidedly remittent and paroxysmal as it is habitually in pneumonia connected with a malarial diathesis."

We have never observed a more ingenious mutilation of a plain record, or a more artful suppression of an author's views than that contained in the foregoing paragraph. From its whole tenor our *reviewer* has evidently designed to convince the reader that this writer (Morehead) whom he unreservedly lauds as an "accomplished physician and pathologist" had attributed the periodicity of the febrile movement in the cases of pneumonia he observed solely to an "*asthenic state of the system*," and *not* to the influence of *Malaria*. But what are the facts? Why that this writer, so far from sustaining the views of our critic, that in simple *uncomplicated* pneumonia the fever may be "*decidedly remittent* and *paroxysmal*," positively implies the very reverse, and on the other hand, attributes the remittent character of the fever which he observed, not only in Primary, but in Febrile Pneumonia (as he terms the malarial disease) as well as in Surgical fever to the *influence of Malaria*, thus positively and clearly implying that the *fever in Simple* pneumonia *divested* of *malarial* influence did *not* partake of the periodical and paroxysmal nature at all. To prove all this it will only be necessary to quote this writer's own language fairly and unabridged.

In his chapter on Pneumonia, under the head of symptoms, he thus states, "the remittent character of the fever was well marked in *all* the cases of the *febrile form*. It was also distinctly observed in a *considerable* proportion of the cases of *primary pneumonia*. The *remittent* character of *symptomatic fever* is of frequent occurrence, both in the *medical and surgical practice* of this hospital and may be regarded as a feature of symptomatic febrile disturbance in the *natives of India*, generally more particularly in the *asthenic*. It is of practical importance to watch for the remission for reasons to be explained when the treatment of

pneumonia comes under consideration. *This remittent type of* symptomatic fever probably depends on THE INFLUENCE OF MALARIA PRE-EXISTING IN THE CONSTITUTION and is excited by local inflammation, just as *intermittent fever may be excited* by exposure to cold in the same state of the system. The inflammation is the cause of the fever. The state of constitution previously engendered BY THE INFLUENCE OF MALARIA *determines the type* which that fever assumes. But whatever the true explanation may be, the fact is undoubted that symptomatic fever in *asthenic natives* affected with pneumonia *in Bombay* is in many instances markedly remittent in type. So much so indeed that it is frequently a difficult question of diagnosis whether the particular instance ought to be classed as primary or febrile pneumonia."* And *again* in his remarks on "Treatment," this writer reiterating the same views continues †"In my remarks on "Symptoms," I stated that the *symptomatic fever* of *primary pneumonia* in *asthenic natives* is not unfrequently *distinctly remittent* in type, and it seemed to me *reasonable to assume* that it *became* SO *in consequence of the* OPERATIVE INFLUENCE OF MALARIA. Actuated by *these views* I have latterly in *all cases* in which the remission was well marked *given quinine* in combination with antimony in the *same manner* as in the *febrile cases* and very frequently with the *same good effect*, though I think that the improvement in the lung has taken place more slowly."

If in addition to these clearly expressed opinions of this author, the reader will remember that the writer possessed opportunities of contrasting pneumonia occurring in the population of England (the work being published in London by the author himself whilst on "sick leave") with that occurring in the asthenic natives of India, *asthenic* from the "*influence of malaria pre-existing* in the constitution," he must readily agree with us that this writer, so far from confirm-

*Clinical Researches on Disease in India. Second Edition, London, 527–8.

?–3.

ing the statement of our Reviewer that "in Simple uncomplicated pneumonia, the fever may be *decidedly* remittent and paroxysmal," presents evidence directly to the contrary, and that our critic in calling him to his aid like an unlucky "engineer is hoisted with his own petard."

4. *The Sprightly School Girl.* But our reviewer, in further proof and illustration of his original views as to the "paroxysmal character of the fever in simple uncomplicated pneumonia" now gives a case. Here momentarily dismounting from the rickety three-legged stool of the critic upon which he has been so long doubtfully poised, he opens his note-book, comes forward and becomes self-metamorphosed into an author. The case is an instructive one, as all cases are when faithfully recorded and properly viewed. We quote it in our new author's own words:

"We have not unfreqnently seen cases of pneumonia during our residence in this section, in which the strictest scrutiny failed to elicit *any positive* and *reliable evidence* of a *malarious* complication, *and* yet, nevertheless, the fever was *decidedly remittent* and *paroxysmal*. During the month of March of the present year, we attended a sprightly young girl, ætat. 13, in one of the female schools of this village, who had a pneumonia of the summit of the left lung. Every morning there was a MARKED *remission in the fever*, the pulse fell 23 or 24 *beats* in the *minute*, became *softer* and less *expanded*, and the skin lost *much* of its *febrile heat*. Our special attention was given to this case, and it was *watched* with the most assiduous care by *highly intelligent attendants*. Had there been any evidence of a *chill*, unusual "coolness of the extreme parts," or a remarkable "reduction of temperature confined to the ends of the nose, toes and fingers," to which Dr. Manson directs our attention as being "almost invariably observed during the morning hours," and just before the rise of fever in *his* "malarial pneumonia"—such phenomena could not have escaped detection. Indeed, the case was watched with special reference to Dr. Manson's description of that form of the disease. This young girl did not *come from* a malarious region, and her mother informed us on her arrival, that her daughter had never suffered from any *form of periodic fever* in her life. She has certainly had nothing of the kind since. The case yielded kindly to treatment in about a week, without the *employment of quinine, or any other antiperiodic agent*. We have attended SIMILAR CASES with physicians of long experience in the diseases of *this region of country*, in which had there been *any trustworthy evidence* of a malarious implication, it defied our powers of perception. And he must, indeed, be an extremely careless or incompe-

tent practitioner, who could overlook phenomena so prominent and self-imposing as those described by Dr. Manson as marking the "febrile action" of "malarial pneumonia."

We are free to confess that we have never seen so many errors in fact and logic, associated in one paragraph, as we shall easily prove to exist in this recountal of a single case, a case given as an example of simple frank pneumonia. Our critic, after declaring that "the *paroxysmal and periodical recurrence* of the *febrile movement*" to be "the *leading, distinguishing characteristic* of pneumonia, impressed by a *malarious* influence," gives this case as an instance in which "the *strictest scrutiny failed to elicit any reliable evidence* of a *malarious* complication;" and yet, "the fever was *decidedly paroxysmal* and *remittent.*" If this is not a flat contradiction in terms, we are benighted. Though asserting that "*undoubtedly* the *most constant, most prominent*, and therefore the *most reliable distinguishing characteristic* of pneumonia impressed by the *poison of malaria is* the *marked periodical exacerbations* and *remissions* of the *febrile* movement," he yet denies that there were "*any trustworthy* evidences of a *malarious* implication" in this case (or "similar cases") although "*every morning* there was a *marked remission* in the fever, the pulse fell 23 or 24 beats in the *minute*, became *softer* and *less expanded* and the *skin* lost *much* of its *febrile heat.*" And why? Upon what grounds does he contest the malarial character of the case? Oh! incomparable logician! Oh! acutest of critics! Why, because, forsooth, in the *First* place "the chill" was not detected by the "highly intelligent attendants." *Secondly*, because "this young girl did not *come from* a malarious region," and *Thirdly*, because "the case yielded kindly to treatment in about a week *without* the employment of *quinine* or any other anti-periodical agent."

These arguments can be easily disposed of; not one of them will hold water for a moment.

1st. Because the chill was not detected. We will remark in the first place, that as Dr. Howard asserts that in Mala-

rial Pneumonia, "he is unable to verify, from his own experience that the rise of fever is almost invariably preceded" by the group of symptoms we have designated by the term "insensible chill," he cannot legitimately lay claim to the absence of this stage as a proof that this case was *simple* and not malarial, and in the second place, that no matter how "highly intelligent" the "attendants" were who "watched this case," that their failure to detect it is far from being a conclusive proof that it did not occur, as we have on several occasions placed our patients in the care of "highly intelligent attendants," and who were on one occasion assisted by a "highly intelligent" physician who after watching twenty-four hours failed to detect the chill, yet on our arrival we at once convinced them that the patient was at that moment in the chill, the feet of the patient being very cold, though closely covered and a warm brick near them—which state was promptly followed by an intense and prolonged exacerbation of fever. We therefore reject the report of these "highly intelligent attendants" as incompetent medical testimony. We may remark *en passant* that if we have encountered more annoyance from one quarter than another in our professional career, it has been from the reports of "highly intelligent attendants"—composed, as they usually are, of garrulous old women, volunteer nurses and neighborhood quacks—a guerilla band who are ever hovering about and harrassing the flanks of the regular profession; and although it is the duty of the physician to gain all information bearing upon the welfare of his patient, yet in listening to their communications, if he does not weigh well and maturely consider them, he will almost inevitably be led into error. Indeed, it would seem that often with the best intentions to direct aright, they exert their ingenuity to mislead.

2ndly. Our critic in order to prove that the case of this "sprightly" young lady was non-malarial, further informs us that she did not come *from* a malarious region, and her mother (the old ladies again) informed us on her arrival,

that her daughter had never suffered from any form of periodic fever in her life."

Although we are here told that this young girl did not "come *from*" a malarious region, yet we are not enlightened concerning her previous whereabouts. We should have been pleased to have known the "local habitation" of this sprightly young demoiselle, that charmed spot in this southern clime untouched by the chilling breath of malaria. Perchance it is some enchanted isle full of—

> "Sounds and sweet airs that give delight but hurt not,"

where, like the peerless Miranda, she may wander forth serene, secure and invulnerable, though another "hag-born" Caliban should hiss—

> "As wicked dew as e'er my mother brushed
> With raven's feather from unwholesome fen,
> Drop on you."*

Alas! the wand of Prospero is broken and his book is buried

> "Deeper than ever did plummet sound."

But wherever dwelt this sprightly maiden, whether she *came from* a malarious region or not, is a matter of but little consequence in this discussion since it is certain she *came to* a place which does not enjoy entire immunity from malarial disease, the reverse of which is here obviously and clearly implied by our reviewer. Yes, we unhesitatingly affirm, from our own observation of diseases in that village, that malarial fever has originated there. In the epidemic of 1846, Warrenton suffered severely, and cases have since continued to occur there. It being only seventeen miles from my location, in that epidemic I often prescribed for at least forty patients a day ill with malarial fever, many of whom were in a few miles of Warrenton. Two of

*Tempest, Act. 1, Scene II.

the gravest cases of Malarial Pneumonia I ever witnessed, one in consultation with Dr. W. T. Hawkins, and another with Dr. A. Plummer, occurred within eight or nine miles of that place. Who will ever forget that never-to-be-forgotten chill with which old Dr. Pope (the former popular resident physician of that place) was attacked, and which the old gentleman recounted with such faithful and detailed minuteness, that he never (in his description) could get out of the cold stage at all. And yet, in the face of these facts, our reviewer would have us believe that this young girl's pneumonia was uninfluenced by malaria, because she did not "*come from* a malarious region." If she did not "*come from*" she certainly *came to* a region which, although like many other portions of the country in which malarial diseases are habitually epidemic, is now *comparatively* free from those affections, yet is far from being able to claim an entire exemption.—This limb of the argument therefore, also falls to the ground.

3rdly and lastly. Our reviewer is equally unfortunate in offering in proof that this case was non-malarial, the fact that "it yielded kindly to treatment in about a week without the employment of quinine or any other anti-periodic agent." This argument is hardly entitled to consideration, based as it is upon the groundless assumption that miasmatic diseases cannot be successfully treated without such measures being employed.

It is well known that cases of all forms and complications of malarial disease may recover without the employment of "quinine or any other anti-periodic agent."

When we first settled in this region, the common practice among the most eminent physicians in the most pernicious cases was little else than expectant—quinine being withheld until a decided remission or intermission occurred, in fine, being wholly denied to the patient until nature, unaided, was obtaining the mastery over the disease. We well remember some of the gravest cases of the algid form which recovered "without the employment of quinine or

any other anti-periodic agent." Did this prove the cases non-malarial? Certainly not! Surely our reviewer cannot therefore, from the circumstance of his sprightly school girl's pneumonia having yielded without anti-periodic agents, claim that the case was not, what we feel confident that it was, an instance of malarial pneumonia.

We should drop this case here did we not believe that a dangerous practical precedent is involved in the conclusions of our reviewer. Although *this* "*case* kindly yielded to treatment without the employment of quinine or any other anti-periodic agent," we are not so sure that this would be the usual result of the omission—and we do not hesitate to say that it was even in this case, unsafe practice to withhold it. We deny that Dr. Howard has any respectable authority (and surely there is no reason) for neglecting the use of quinine in cases of pneumonia, which like this, was characterized by evident remissions. Certainly he receives no support in such omissions from Morehead, his "accomplished physician and pathologist," whom, as we have seen, gave quinine "in *all* cases," even those which he considered "primary," "in which the remission was well-marked in the same manner as in the febrile cases," or from Grisolle, his "greatest of all modern standard authorities," who declares that the administration of the febrifuge (quinine) seemed to him the principal indication, and which should govern all others,"[1] nor even from his "learned and accurate," La Roche, who inculcates that, "whatever be the cause of periodicity in a disease, or rather whatever be the nature and cause of a disease which presents a well-*marked remittent* or intermittent character, quinia will be found a useful remedy in its treatment"[2] Thus endeth the comedy of the "sprightly school girl." We are compelled to confess, that notwithstanding the artistic construction of its plot and its happy *dénouement*, in spite of the vivacity of the

[1] Traité de la pneumonie, p. 727.
[2] Pneumonia and Malaria, p. 488.

heroine, the wisdom of *la mère* and the intellectuality of the nurses who compose the *dramatis personæ*, that the piece has been damned on its first presentation. Authorship is clearly not thy vocation *mon frondeur;* already thou perceivest that it is more easy to cavil than to create—to depreciate than to excel,

> "A man must serve his time at every trade
> Save censure: critics all are ready-made."

Let us assist thee to remount thy tripod! there hast thou thy home—there thou reig'nst supreme!

In concluding the discussion of the febrile action in pneumonia, we would remark that we have had some little difficulty in forming in our mind a perfectly definite idea as to the precise opinions of our reviewer on the subject. He first states that in simple uncomplicated pneumonia, "the fever may be decidedly remittent and paroxysmal," and again, that in that disease that "the fever is rarely *as decidedly* remittent and paroxysmal as it is habitually in *pneumonia* connected with a *malarial* diathesis." Or in other words, that in Simple Pneumonia, the fever may be *decidedly* remittent and paroxysmal, but in Malarial Pneumonia, it is *more decidedly* remittent and paroxysmal. Well, we should say the "differential diagnosis" is here very delicate and nice—indeed it is tapered down to a very fine point. We must confess ourselves unable to discriminate between these contending superlatives—that we are unequal to the perception of these attenuated distinctions.

In strong contrast with the declarations of our reviewer that "he has *not unfrequently* seen cases of pneumonia during his residence in this section in which the *strictest scrutiny* failed to elicit any *positive* and *reliable evidence* of a *malarious complication*," and yet, nevertheless, "the fever was decidedly *remittent* and *paroxysmal*," and to his more unequivocal declaration that, "in simple uncomplicated pneumonia, the fever may be *decidedly remittent* and *paroxysmal*," we finally appeal to the record of him whom our reviewer

terms "the philosophic and lamented Drake," and whose work he extravagantly endorses as "having no parallel of its kind in Medical literature."

This writer, who not only had observed the simple frank pneumonias of the north, as well as the malarial pneumonias of the south, but who, "on examining his notes, found that he had conversed with more than *one hundred and fifty physicians* scattered from the shores of the *Gulf of Mexico* to those of the *Great Lakes* and who, to use his own language, was "guided by their experience, and that published by others in the journals, as well as his own in one of the middle latitudes, positively declares it as one of the principal guides "in reaching a diagnosis" between Simple and Bilious or Malarial Pneumonitis," that the *fever* INSTEAD OF THE CONTINUED TYPE OF THE PULMONARY PHLEGMASIÆ occurring in those who have NOT received a MALARIAL or autumnal fever *impress*, is subject to remissions even when most intense."*

To sum up. While willingly admitting that which is patent to all, that in a vast number of non-malarial diseases there is a tendency in the fever in some degree to increase in the evening, or at some other period, yet this by no means is usually followed by a "*marked*" regularly recurring remission on the following morning, "nor is the diurnal variation sufficient to characterize the change as "decidedly remittent and paroxysmal." If this were so, the diagnosis between Periodical and Continued fever would be difficult indeed,and the dscrimination between Idiopathic and Malarial Pneumonia, would be often an insolvable problem.

From this *exposé* of the authorities, facts and arguments of our reviewer, the reader will doubtless unite with us in the conclusion that his cases of supposed "simple pneumonia in which the fever was *decidedly remittent* and *paroxysmal* seen in this section," were only just so many blunders

*Diseases of the Interior Valley of North America, 2nd Series, p. 869.

in diagnosis. Studying Southern diseases with Northern and Foreign books in his hand, and guided more by their teaching than by the results of his personal observation and independent thought, he has thus "*forced the forms of our diseases to bend to their descriptions.*"

THE ENTERIC SYMPTOMS IN MALARIAL PNEUMONIA.

If there was any portion of our essay which we should have deemed less obnoxious to criticism than another, we should have chosen our observations on the intestinal symptoms in this disease as being entitled to that distinction. But our reviewer affects to think otherwise. To him censure is congenial and commendation did not enter into the purpose of his *critique*. With the facility, however with which truth vindicates itself, and triumphs over error, "when left free to combat it," we shall substantiate the correctness of our narrative and refute his inconsistent and contradictory animadversions. As our remarks on these symptoms were very brief, we quote them entire:

"*The condition of the bowels in this disease* (*malarial* pneumonia) *and the latter* (*simple pneumonia*) *is very different.* In the *malarial form the intestinal canal seems generally to be in a state of phlogosis* OR exalted *sensibility.* This *is manifested by the frequent presence of diarrhœa*; and *when this is not evident by the hypercatharsis often induced by the mildest* aperients. *Later, when the disease succumbs, convalescence is usually announced by those characteristic, and we may say, critical evacuations before described.*" Among the symptoms denoting the termination in health, these favorable discharges were characterized as "*greenish-black*, viscid *inodorous* stools, closely resembling tar in appearance."

In opposition to these statements, our reviewer advances the following: 1st. "That *all* diseases at the South evince greater susceptibility of the intestinal canal to irritating impressions than they usually exhibit in colder latitudes—that the intestinal canal is generally much more impressible in the South in *all* diseases than it is at the North—that in our climate this is a *normal susceptibility*—and that "*many cases* of *pneumonia*, particularly those occurring in

the spring months, offer this susceptibility very highly marked, and that too, in instances *not at all complicated by a malarious impression.*"

We may remark in the first place, that as our critic agrees that in the pneumonia of *this climate*—and *that is the pneumonia upon which we have written*, the bowels evince a tendency to diarrhœa, that the correctneess of our description is thus endorsed, and that in this regard, it presents a striking contrast with the condition of the intestinal canal in Simple pneumonia as observed by any respectable writer, including his favorite authorities—that it is therefore what he denies it to be, diagnostic. It is true that our reviewer avers that in Simple pneumonia, by which we are led to understand that he designates those "many cases not at all complicated by a malarious impression," the bowels evince the same susceptibility, but we hold that it remains to be proven that these *many cases were* examples of *simple pneumonia.* We contest the assertion that "*many* cases of pneumonia" occur "in the spring months," or in any other months "in this climate," not at all complicated by a malarious impression.' Utterly rejecting the authority and esteeming the opinion worthless, of any one who like himself considers that simple uncomplicated pneumonia is "not unfrequently seen in this section," in which the fever is decidedly remittent and *paroxysmal*"—we equally repudiate the opinion that *simple idiopathic uncomplicated inflammation of the parenchyma of the lungs* is necessarily attended with "very highly marked susceptibility," or tendency to diarrhœa in this or any other climate. A glance at authorities, (and in justice to our critic and for the sake of fair discussion we will refer to those endorsed by him) will be sufficient to establish our declaration. Let us refer first to his "greatest of all modern standard authorities on the subject of pneumonia."

1. *Grisolle.* In fifty-one cases of Simple pneumonia observed by this writer, in which no purgatives were administered, he states that in "forty-two, the bowels were *consti-*

pated, and in the remaining nine, only a *slight diarrhœa* occurred."*

2. *Wood.* This writer observes that in "Common or lobar pneumonia," that vomiting and diarrhœa are *occasional* symptoms, the latter occurring in the advanced stages (and he might have added in the advanced stage of nearly every disease and therefore the statement amounts to nothing) but that whenever occurring, these symptoms were only "*accidental.*"[1]

3. *Swett.* In Simple pneumonia this author states without exception that "the bowels are *constipated.*"[2]

4. *Chomel.* This writer merely observes that in Simple Pneumonia a slight diarrhœa *sometimes* occurs "at an advanced stage" of the disease.[3]

5. *Andral.*[4] This author does not mention diarrhœa at all in his description of Simple Pneumonia.

But we forbear from further quotation; these are sufficient. Indeed, if all the authorities cited by our critic or ourselves are examined in relation to the condition of the bowels in simple pneumonia, they will be found bearing the same testimony, viz: that those organs usually present no disorder of function, but are generally constipated, and instead of presenting any "marked susceptibility," or "impressibility," they will be found withstanding the relaxing influence of the lancet, the emulgent and cathartic effects of calomel, and even bearing themselves stoutly up under the rapid attacks of tartar emetic *à haute dose.* If, however, we turn to the history of Bilious or Malarial Pneumonia, as recorded by those authors familiar with its events, how changed is the scene. Listen to Drake. Without saying one word concerning diarrhœa or "intestinal susceptibility" in his chapter on "Simple Pneumonia," yet, when he de-

*Traité Pratique de la pneumonia, p. 269.

[1]Practice of Medicine, ii, p. 11.

[2]Diseases of the Chest, p. 89.

[3]Dict: de Médecine, Tome xxv, 171.

[4]Clinique Médicale iii. (loc. cit.)

scribes "*Bilious or Malarial Pneumonitis*," the bowels no longer play a passive *rôle*, but forcibly arrest attention. This writer observes. "In some cases vomiting and *purging of bile* occur, in others there is no excretion of bile from the liver, which seems torpid, and by not pouring out its bitter and alkaline fluid into the bowels, permits *the occurrence of an exhausting diarrhœa*, being watery and so acrid as to excoriate the sphincter."[1] And what is the testimony of Wood. This writer, whom we have seen only mentions diarrhœa as an accidental symptom in Simple Pneumonia, yet observes that Bilious Pneumonia is sometimes associated with the more malignant forms of miasmatic fever,"[2] in which latter disease, he tells us that "the bowels may be confined, but *oftener* the reverse, the dejections being exceedingly copious and frequent in many instances, not less than several times an hour."[3] To these may be added the evidence of Swett, who as we have seen, declares that in Simple pneumonia "the bowels are *constipated*," yet in Bilious pneumonia, among the prominent symptoms he places "free bilious discharges with a tendency to a typhoid type."*

2. Our critic declares that there is no reason *a priori* known to us (him) why a malarious influence should necessarily impart to pneumonia, unwonted irritability of the bowels or engraft upon it a "state of phlogosis" of the intestinal mucous membrane, "and that to assume that this state of the bowels is owing to the action of that element in the absence of any demonstrable proof of its existence, is *simply* to *beg* the *question*."

As our critic has not been sagacious enough to perceive any reasons *a priori*, we will endeavor to enlighten him with *some reasons a posteriori*.

[1]Dis. Int. Valley, N. America, 2nd series, 869–70.
[2]Practice of Medicine, ii, 17.
[3]Ibid. i, 293.
*Dis. of the Chest, p. 104.

(a.) *Reasons deduced from Common Observation.*

Among the leading phenomena observed in all grades of Malarial fever there are exhibited a series of actions which although not strictly and absolutely peculiar to them, yet which, in the regular order of their occurrence, as well as in their unusual force of expression, may be deemed distinctive and have therefore, arrested the attention of all observers—the specific character of these actions consisting to use the concise language of Broussais, in "alternate determinations from the circumference to the centre and from the centre to the circumference."*

From this unequal distribution of the stream of life the interior organs necessarily receive an undue afflux, the consequences of which are not only revealed to the eye of the clinical observer in a series of organic functional perturbations, but are further disclosed by the knife of the pathological anatomist. In these events the intestinal canal participates, and although its implication is more conspicuously evident in the graver and pernicious cases in which, to use the expression of Wood,† "Life seems running out with the serous and serosanguineous discharges in striking analogy with epidemic cholera," yet it is still evident in the milder forms of the disease, which, as we have before remarked, differ from the former *in degree* and not *in kind*. Who has not seen the slumbering tendency to diarrhœa in the most benign cases roused into dangerous activity by an ill-timed cathartic? Who has not witnessed a simple chill thereby converted into a protracted cold stage or fatal collapse? Yet, in despite of these facts, known to all experienced and intelligent observers—our critic avers that there is nō reason known to him, why a malarious influence should necessarily impart to pneumonia unwonted irritability of or engraft upon it a

* Histoire des Phlegmasies on Inflammations chroniques, Tome 1, p. 130.

† Practice of Medicine, i. 294.

state of phlogosis of the intestinal mucous membrane and to "assume" that it does so "is *simply* to *beg* the *question.*"

(b.) *Reasons extracted from our critic's "Prayer Book."*

Although the pathology of Malarial fever, as set forth in our reviewer's *vade mecum*, which refers the morbid determinations to a "peculiar state of the innervation," is by no means original, having been as we have before stated, announced by Rayer and adopted by Guerin de Mamers and others; yet its mere sanction by our critic's repository of medical piety, ought of course to be sufficient with him to render it orthodox. In the following passage extracted *verbatim* from Professor Wood's chapter on "*Pernicious Fever,*" "the *essential cause* of which he declares is *undoubtedly the same* as that of the *ordinary forms* of miasmatic fever," or as he definitely expresses it, "a more intense action of the miasmatic poison," the author thus explains the manner in which a malarious influence gives origin to those intestinal symptoms we have alluded to, by "*impairing innervation.*" "But how account for the oppression of stomach and the copious vomiting and *purging?* Upon the same principles exactly. There is no feeling of the stomach unless it may be excessive spasm, which is more insupportable than that arising from *deficient innervation.* This can be readily understood by those who have experienced the distressing sensations of a half-paralyzed limb. The *bloody serum* or *pure blood discharged* from the stomach and *bowels, escapes through the coats of the vessels,* exactly as blood percolates through the tissues after death; with this exception, that as the vis a tergo still continues in some degree, it adds a vital expelling force to that of mere physical transudation. *The alementary canal may be said to sweat like the external surface.* An appeal may be made to the discoloration, softening, &c., of the mucous membrane as evidences of inflammation or congestion. I am not disposed to deny the occasional existence of some degree of inflammation in this membrane. But it is quite insuffi-

cient to account for the symptoms. We do not witness the same phenomena in other cases of much more extensive inflammation. Besides, much of the softening of the tissue may be ascribed to depressed vitality, and much of the discoloration to the stagnation of blood like the livid or purple color of the skin."

It is true, as our reviewer states, that Dr. Wood declares that in ordinary Remittent fever, the bowels are usually constipated, especially in the *early* stages, and that he has seldom found much difficulty in procuring free alvine evacuations, yet, he adds the *stools* are generally *disordered*, sometimes dark-colored and offensive, that at a *somewhat advanced* period of the complaint, a bilious *diarrhœa* not unfrequently sets in and *dysenteric* symptoms make their appearance and that in some instances *looseness* of the *bowels* exists from the *commencement*—or even the complaint may be ushered in with a kind of *cholera-morbus*. Again, under the head "*Modifications*," he states that inflammation of the bowels is not uncommon, though it occurs most frequently in the advanced stages, as indicated by *diarrhœa*, etc., and among the prominent diagnostic symptoms he places "the vomiting and *purging* of bile;" whilst in describing the "Anatomical characters," he states that "the mucous membrane of the bowels is *often inflamed*." Now if we bear in mind that this writer considers that Intermittent, Remittent and Pernicious fevers are merely grades of the same malady, produced by the same cause—Malaria—it necessarily follows that if that cause acting in its extreme intensity gives rise to intestinal symptoms bearing as he says a "striking analogy to those of epidemic cholera,"* that the same cause acting with less force must give to symptoms of the same character however diminished they may be in degree, or at least a tendency thereto—just as the cause of Asiatic cholera may produce symptoms of every gradation in violence, from the slightest tendency to

*Practice of Medicine, i, 294.

diarrhœa to the colliquative flood leading to rapid and fatal collapse. So well is this tendency understood by practitioners familiar with Malarial fever, that as Drake truly observes in reviewing the cathartic treatment formerly adopted "that it has *grown into a saying* in many parts of the South that congestive fevers are made by this practice."*

(c) *Reasons Alleged by Drake.*

Although these have been already incidentally mentioned, yet as they are very brief, we quote the paragraph in which they are found:

"Such is the derangement of the biliary function in autumnal fever whether the attack be original, or occurring as a relapse, that in a large proportion of the cases now in our contemplation, bilious symptoms are decidedly present. In some, the secretion of healthy bile is excessive; the fur on the tongue assumes a dirty, yellowish tint, there is a bitter taste in the secretions of the mouth, vomiting and PURGING OF BILE occur, and now and then eructations of that fluid. Its presence is also manifest in the urine, the serum of the drawn blood, the white of the eyes, the skin, and as I believe, but not on conclusive evidence, in the sputa from the bronchial tubes. In other cases, the signs of a bilious deterioration of the blood are present, but there is no excretion of bile from the liver which seems torpid and *by not pouring its bitter and alkaline fluid into the bowels, permits* the occurrence of an EXHAUSTING DIARRHŒA, *the discharges being watery* and so acrid as to excoriate the sphincter."†

We have thus given to our reviewer, in the absence of any reason of his own, "why a malarious influence should necessarily impart to pneumonia unwonted irritability of the bowels," or tendency to diarrhœa, reasons from three sources. 1st. Those derived from COMMON OBSERVATION. 2nd. From the doctrines of *his* "PRAYER BOOK," and 3rdly. The theory of the "PHILOSOPHIC DRAKE"—arguments which we may characterize as reposing on the triple base of COMMON SENSE, RELIGION (our critic's) and PHILOSOPHY. If these do not convince him we must despair of his conversion, and

*Dis. Int. Valley N. A., p. 102.
†Op. cit. 869–70.

turn him over to some "learned and accurate La Roche" who inflicts five hundred pages* on "pathological and etiological heresies."

THE CRITICAL DEJECTIONS IN MALARIAL PNEUMONIA.

As the remarks of our reviewer embody our description of these evacuations and our views as well as his own in regard to their significance and value we quote those strictly relevant to the subject:

"Special character of the *intestinal discharges*. These come too late for useful diagnosis, and, we suppose are only adduced by Dr. Manson to complete the list of symptoms which he deems differential between "malarial," and other forms of pneumonia. In the former, we are told, "convalescence is *usually* announced by characteristic critical alvine evacuations," which are "greenish, black, viscid, inodorous, and closely resembling tar in appearance."

In certain cases of *remittent fever*, generally termed by authors *hepatic*, on account of the marked evidences of congestion and torpor of the liver, these peculiar dejections are said particularly to occur, and frequently to herald convalesence: hence they are thought to be in some measure critical. But in the *immense majority of cases of ordinary remmittent fever*, they are *not observed at all*; and by some of *our most authoritative writers of large experience*, are not even mentioned. In his essay on remittent fever, already referred to, Dr. Manson himself does not speak of their occurrence in his description of the usual course and progress of their disease; and only when indicating the diagnosis between it and typhoid fever, does he allude to them, and then only to say that they "almost certainly denote a favorable termination in" the former.

But the qestion arises at once—*how often are they witnessed?* We have long believed that they frequently occur from the administration of mercury alone; and in several instances we have proved it by withdrawing that agent. We do not hear of them so often now in our periodical fevers as we did formerly, owing to the administration of quinine early in the disease, and the more restricted and rational employment of mercurials: hence our inference, that they frequently resulted from the special action of these agents on the liver."

"Dr. Manson says that those critical discharges which usually announce convalescence in "*malarial* pneumonia," are "*inodorous!*" As he seems to have often met with them, he certainly ought to know; but they

*Pneumonia: Its supposed connection, pathological and etiological with Autumnal Fevers, p. 502.

are not always odorless, as we have good reason to be confident. We have seen them so offensive as to taint the apartments, affect the patients themselves with the most distressing nausea, and even drive the attendants out of doors. Bolling, Cartwright, Condie, Eberle, Stewardson and Wood, all speak of these peculiar stools as heralding convalescence in certain cases of remittent fever, but are silent, in regard to their being destitute of odor, while the observant Chapman states positively, that they are "*fetid.*"

"If Dr. Manson could succeed in *proving* that there is a "form of pneumonia *generally* seen by Southern observers," in which "convalescence is *usually* announced" by a particular kind of "*inodorous* stools," he will have taken an important step towards making out this case; for we are not aware that such an "affection" has "attracted the attention of recent investigators," or that it has been even "cursorily and imperfectly noticed by any of the modern standard authorities."

In order to reply to these confused and contradictory strictures, it will be necessary to determine,

1st. The physical character of these evacuations.

2nd. The frequency of their occurrence.

3d. Their diagnostic and prognostic value.

1. *Physical Character.* The discharges to which we here especially allude, to a casual observer, have a lustrous, jet black appearance; are of the consistence of viscid tar, without being very adhesive; in quantity, they may vary from two or three ounces to as many pounds. These excretions, when unmixed with other matter, have no appreciable odor, and flies or other insects, instead of being attracted by, seem to avoid them. On spreading a portion of this matter thinly on white paper it will, however, be discovered that, instead of being black, it is really of a very dark green color, and consists of meshes of soft fibres, mingled with a thin green mucilaginous fluid. These discharges are identical with those mentioned by some authorities as denoting a fortunate termination of malarial fever, and are usually considered as proceeding from the liver. Eberle terms them *black bile* and describes them as "black and pitchy," and again as "tar-like alvine discharges."* Wood characterizes

*Practice of Medicine, i, 133. Eberle's Notes, p. 42.

them as "a black tar-like liquid;"* and Dr. Lewis as discharges of dark bilious matter, and again, as "evacuations of thick black matter."† They are, however, silent in regard to their odor, though agreeing as to their import.

In opposition to the description given in our essay, of which the foregoing is a more minute account, our critic avers that "they are not always odorless, as he has good reason to be confident, that he has seen them so offensive as to taint the apartments, affect the patients themselves with the most distressing nausea, and even drive the attendants out of doors," and that "if we could succeed in proving that there is a form of pneumonia generally seen by southern observers, in which convalescence is usually announced by a particular kind of inodorous stools, that we will have taken an important step in making out our case."

Early in our professional career, when malarial diseases were exceedingly rife, our attention was called to the fact that this particular kind of discharge, the certain harbinger of a happy termination, was destitute of any disagreeable odor. An experience of nearly twenty years has confirmed the truth of the lesson then taught, and on the basis of that experience, we here unhesitatingly declare that the cases of any form of miasmatic disease in which a return to health is heralded by evacuations "so offensive as to *taint* the apartments, affect the patients themselves with the most distressing nausea, and even drive the attendants out of doors," must be of rare and exceptional occurrence. For ourselves, we never can regard any patient affected with any disease, as approaching sure and perfect convalescence whose discharges are very offensive, and we are equally as certain that a favorable prognosis based thereon must be usually fallacious. The observation is as ancient as medicine itself, that intestinal discharges occurring in any disease when possessing a black color and very offensive smell

*Practice of Medicine, i, 269, 295.

†Med. History of Alabama, N. Orleans Med. & Surg. Journal, iii, 698–9.

are ill-boding omens. "Those discharges are *deadly*," wrote the *Father of Medicine*, "which are *black* or fatty or livid or verdigris green or *fetid*."[1]

"A speedy death is indicated," said Celsus "when the discharge is liquid, and also either *black* or pale or fat, and especially if it has a *very fetid odor*."[2]

"In all stages of the disease," observed Sarcone in describing a malarial epidemic in Naples, "*black*, colliquative and *very fetid stools* were *dangerous* and *mortal*."[3]

"Fetid and colliquative stools," said *Alibert*, "indicate that the patient will speedily succumb."

"A *black* color and cadaverous odor of the fœcal discharges," *Chomel* declares "are always unfavorable signs."

It has been seen that our reviewer only cites one author as sustaining his statement in regard to the fetid odor of the salutary evacuations in malarial disease, viz: "the *observant* Chapman." As the question is one, which, strictly speaking, rather belongs to *olfaction* than *observation*, we cannot yield our positive experience even to those of that distinguished master, in a matter of *noseology*.

2. *Frequency of Occurrence.* Our reviewer in continuation of his remarks upon these benign evacuations, exclaims. "But the question arises *how often* are they witnessed: It is almost needless to answer this interrogatory, as he in the next sentence gives the reply himself. "We have long believed that they *frequently occur* (in remittent fever) from the administration of mercury alone, and in several instances we have proved it by withdrawing that agent," thus flatly contradicting his assertion in the paragraph immediately preceding that in the *immense majority* of cases of ordinary remittent fever *they are not observed at all.*" Again if it is true as our critic states that in certain cases of remittent fever generally term-

[1]The Genuine Works of Hippocrates, Syd. Soc. Ed. i, 243.
[2]De Medicina, Ed. Rotterodami, 1750, p. 56.
[3]Histoire Raisonnée des mal. obs. à Naples, 2, 110.
[4]Traité des Fièvres Int. p. 203,
[5]Pathologie Générale, 4me ed. p. 525.

ed by authors *hepatic* on account of the marked evidences of congestion and torpor of the liver, these dejections are said *particularly to occur* and *frequently to herald* convalescence," then he again answers his own question, for it will be remembered in discussing the bilious symptoms he has expressly declared that *bilious vomiting* and *other evidences of hepatic trouble much oftener* present themselves in pneumonia offering positive proofs of the *mingling of a malarious element* than when no such proofs are present," and we shall see hereafter that he endorses Drake's, Wood's, and Eberle's description of Bilious Pneumonia as among those of the "modern standard authorities," who have correctly delineated this disease, in all of which the bilious symptoms are prominently set forth. If, therefore, bilious vomiting and other evidences of hepatic trouble are "proofs of the mingling of a malarious element," and these black, critical evacuations *particularly* occur in remittents, generally termed by authors *hepatic*, on account of the marked evidences of congestion and torpor of the liver, then it follows that they must very frequently be *witnessed* in malarial pneumonia, which, according to the declaration of our reviwer himself "is merely the ordinary form of *pneumonia complicated* by the *impression* of a *malarial law*," and he therefore has unwittingly, furnished the proofs of our assertion that "convalescence is usually announced by these characteristic critical alvine evacuations." His own disjointed and contradictory statements, which, like stones, were thrown for our demolition, on being collected together thus form an arch of support to our text, and which the weight of his strictures (if they have any weight at all) only serves to strengthen.

Nor is the equally inconsistent admission of our critic that he does not hear of these critical discharges "*so often*," *now* in our periodical fever as he "*did formerly*," at all surprising, as one of the reasons assigned by him in the same sentence is amply sufficient to account for their absence—viz: "the early administration of quinine," which, arresting the disease at the onset, anticipates and prevents

the natural termination or crisis" of which these discharges are among the most prominent evidences. Certainly it could not be expected that the critical phenomena in any disease would be seen as "often" when the disease was artificially arrested in its course as when allowed to proceed unmolested to its regular termination. Of course, in our essay, the delineation of the natural course and progress of the disease was only attempted. No description could be termed faithful which embodied the history of cases cut short in their career. As we have said before, in the commencement of our professional life a mild expectant treatment being usually adopted, we had the most ample opportunities of observing this disease when unmolested by treatment, and it is from the cases observed then and from those occasionally seen since, in which art had not interfered, that the history given in our essay has been penned.

If our critic had carefully read the authorities whom he has merely cited on this subject, he would perhaps have refrained from his captious criticisms thereon. Eberle, in the "Notes of his lectures," in treating of the hepatic modification of Remittent fever observes that "towards the termination of the disease the liver, in *most instances*, pours out an abundance of dark-colored bile, which is evacuated by stool and sometimes by vomiting," and adds, "that the stools in such instances are black and pitchy," (p. 42,) and in his "Practice," reiterating these statements he observes positively that, "except the disease be arrested by remediate treatment in the early period of its course *there are but few recoveries in which such discharges do not occur.*"*

If it be objected to these statements that these evacuations only occur in "hepatic" cases, and therefore do not fully sustain our assertion that "convalesence is *usually* announced" by their appearance, we have only to turn to Eberle's description of the symptoms belonging to the

*Op. cit. i, 133.

general course of the disease in which the hepatic symptoms are prominently set forth, to find a sufficient answer. Among these he mentions an "icterode or yellowish tinge of the eyes," "bilious vomiting," "a sense of fullness and weight or tension on the right hypochondrium," and "bilious urine." Indeed, this author more unequivocally adds that "*more* or *less derangement* of the *biliary* system appears indeed to be a *universal attendant* on *remitting fever*," and in continuation he adds that "the tendency of miasmata to act upon and disorder the liver has already been particularly mentioned, and it may be presumed from this circumstance, independent of the phenomena of the disease, that prominent functional disorder of the liver, constitutes *one of the most constant* local affections of *remitting fever*."*

Nor does our critic's *Volume of devotional exercises* altogether fail to yield support to our opinions on this head. In his chapter on Remitting fever, *Wood* observes that "copious black tar-like discharges sometimes occur towards the close of severe bilious fever and are considered as a favorable sign especially in cases which have been attended with congestion or torpidity of the liver,"† and again in his observations on "Pernicious fever,"‡ he states that "it is usually deemed a favorable incident when copious alvine discharges of a dark tar-like liquid take place from the bowels as they indicate a restoration of the suspended action of the liver."

We close our reply to the inquiry propounded by our critic as to "how *often*" these discharges "*are witnessed*," with the remarks of Dr. Lewis in his Prize Essay on the Medical History of Alabama. In his observations on Remittent fever he states, "the disease after four or five days' duration, yielded under the influence of copious sweats and discharges of *dark bilious matter*," in other cases, "after the second or third paroxysms which were irregular in dura-

*Op. cit. i, 134.
†Op. cit. i, 269.
‡Op. cit. i, 295.

tion, the disease gave way under the influence of copious evacuations of *thick black matter* and a general perspiration and again observes that *black* grumous discharges from the bowels were *very frequent* and always attended with happy consequences."*

3. *Diagnostic and Prognostic Value of the Critical Dejections.* The diagnostic importance of these discharges having been necessarily involved and established in the foregoing observations on their *frequency*, a few additional remarks will only be necessary in regard to their differential value. But our critic avers that they "come too late for useful diagnosis, and that he suposes that they are *only adduced* by Dr. Manson to complete the *list of symptoms* which he deems differential between malarial and other forms of pneumonia." Our critic, as usual, is wrong again. They *do not come too late* for *useful* diagnosis. A characteristic and frequently occurring symptom which stamps its seal on a class of important diseases and which points to a happy issue can never "come too late." If an error had been committed on account of its absence, it would not have been fatal, as the patient, on its appearance, is destined to recover, and it would throw a flood of light on the character of the endemic or epidemic present. If pneumonia was *prevalent*, these peculiar discharges alone would declare that the surrounding cases were not simple pneumonia, nor typhoid pneumonia, but a phase of that protean malady, that "wandering phlegmasia,"† malarial fever.—Nor were these discharges ominous of evil, instead of being prophetic of good, could it be truly said that they "came too late." How often, at the commencement of an epidemic in which the wisest have withheld, or erred in their judgment concerning its exact character, has the usually fatal "black vomit," which, however "late" it may have come for the individual victim, yet has loud-

*New Orleans Med. and Surg. Journal, iii, 698–9.

†Broussais, Phleg. Chron i, 131.

ly proclaimed the nature of the secret poison just commencing its work around. How often the agonizing spasms, the rice water discharges and dread collapse have revealed the nature of the slight diarrhœas prevailing, and led to timely preventive and remedial measures. They do not come too late! As well might it be said of the accumulated labors of the anatomical school to which our reviewer evidently belongs, that the disclosures of the dead body "came too late," although the cadaver spoke "with most miraculous organ" of the malady of the living and reacting man. And do these welcome signals come too late for prognosis. Oh! no! When day after day the contest between life and death has been fiercely maintained, and friends have gathered 'round the couch of the sufferer with tearful eyes and throbbing hearts; when Science itself baffled stands mute and with averted eye before the inquiring gaze of Love and Friendship, which beseechingly implore in vain, one hopeful, cheering glance. Do they come too late? Ah! no! for then with sparkling eyes and radiant brow, she can joyfully exclaim. Be of good cheer! chase all thy fears away! the struggle is past and Life the victory hath won!

(*To be continued.*)

Letter from S. S. Satchwell, M. D.

PARIS, January 2nd, 1861.

CHARLES E. JOHNSON, M. D.—

Dear Doctor: I left for Europe, as you know, several months ago, and perhaps you are before now expecting a letter from me for publication. I am aware that, during my absence, our readers will expect to hear from me through the North Carolina Medical Journal. Since crossing the Atlantic, I have, from time to time, postponed writing, not merely because I desired before doing so, to familiarize myself to some extent with the hospitals and medical resources of Paris, but for the additional reason, that the unfortunate uncertainty which has attended, for some time past, the appearance of our Journal, rendered it doubtful in my own mind whether my article could reach the public eye before becoming old and uninteresting. But for this disagreeable irregularity, which has of late been the fate of the Journal, I should have written this communication before to-day. Now, however, as I suppose, that our administration is about commencing, I feel induced, even from this distant standpoint, to express the confident hope of more promptness on our part; and I freely pledge myself to unite my own feeble but earnest efforts, with your greater experience and superior abilities, in making our Medical Journal worthy of the confidence and patronage of the profession.

With these remarks as to my silence and my devotion to our Journal, I proceed to say, that my high anticipations as to the facilities and resources here offered for professional improvement, have been more than realized. I have already seen enough to justify me in expressing the belief that the medical advantages of Paris, are greater than those of any city in the world. Especially is this true in relation to the opportunities offered, gratuitously offered, for the study of Anatomy, Physiology, Surgery, Diagnosis, Pathology,

and the Diseases of women and children. Paris has, at no former time, been so justly entitled to this distinction as now. The unexampled prosperity of the city, the increasing number of able and eloquent men in the profession, all struggling for distinction, and the liberality of the existing government in fostering all the arts and sciences, have given a new impetus to the cause of medical progress, and multiplied the sources of medical knowledge. When I inform you that the aggregate number of beds in the various hospitals are more than twenty thousand—that over fifteen thousand cases of disease in all its forms, are here daily opened the year round to the examination of medical men who come hither for improvement—that around every patient are able men, not only willing, but anxious to give clinical instruction—that the great Parisean school of medicine is conducted on a thorough and magnificent scale, numbering twenty-six Professorships that are won by merit alone, and awarding Diplomas only to the deserving, you will admit that there is some ground for the claims of Paris to superiority in medical instruction and in medical advantages. Among so many talented men, and so much ambitious struggling for preferment, as characterize the profession here, the man who urns a position, does so, not by adventitious circumstances, but by prolonged labor and merit: and when he has received it he is apt to hold it. It is, indeed, a redeeming feature in this arbitrary government, maintained by the iron rule and resistless power of military despotism, that it is not by wealth or family influence here medical men are elevated to stations of honor and profit, but by the weight of solid acquirements and intrinsic worth. In this way Dupuytren, Velpeau, and other leading men in Paris, have risen from the lowest ranks of poverty and obscurity to the topmost rounds in the ladder of fame. And hence it is, that members of the profession who have reputation, have acquired it legitimately, and are not so dependant, as with us, upon the fluctuating appreciation of public sentiment as regards practitioners. With us,

medical men are more sensitive; medical qualifications are not so easily determined by the public; and the man with a large practice to-day may lose it to-morrow. Not so in France. Here the ordeal is more searching and just through which he must pass who secures the honors and practice of the French people. When obtained, no rude hands nor unworthy means can displace him. Whether our physicians are not more practical and successful in treating disease—whether the names of these distinguished European physicians and surgeons, of whom we have all heard and read so much, are not magnified through the mists of the Atlantic, involve questions that I will not now discuss, especially not until I know more of them. However this may be, the medical sojourner is anxious, after arriving, to see these eminent men—to hear the words, to see the faces, personal appearance and manners of men whose professional achievements and mental structures, have impressed them at home.

Here, at the time-honored Charity hospital, may yet be seen the delicate-looking and accomplished Velpeau, now nearly seventy years of age, but as industrious and as fond of operating as ever. At the Clinical hospital of the Faculty of Medicine, Paul Dubois, almost worn out, continues his favorite branch of obstetrics and diseases of women. In the same Institution, Nelaton, now the most noted surgeon of France, has daily service, and attracts a larger crowd of admiring students than any man here. He enjoys the reputation of being one of the wealthiest, as he is certainly one of the best surgeons living.

The Charity hospital, the theatre of so many former triumphs and discoveries in medical science, contains six hundred beds for medical and surgical cases, and further extensions are contemplated. The principal surgeons are Velpeau and Malgaigne, and the chief physicians, Nonat, Piorry, and Bouillaud. Malgaigne is a fine operator, and a bold and intrepid surgeon, who studies hard and exercises a great influence in the profession. He is a great critic and is sometimes exceedingly severe and cutting upon the views

and practice of other Professors and writers of Books. Nonat is a rising man here in the important branch of female diseases. He has written a very acceptable book on the subject. Those who are seeking information in uterine troubles, find him not only pleasant and kind as a man, but instructive and interesting. He makes free use of the speculum, using milder caustics or the hot iron to the neck of the womb as cases may demand. In uterine granulations, prior to other applications, I have seen him use, with marked benefit in many cases, a favorite little instrument of his own invention, the Curat. It imparts new action to unhealthy and bleeding surfaces, prepares the way for the application of other remedial agencies, and under its use I have seen patients restored in a short period, who must otherwise have lingered a long time. Piorry, so celebrated in percussion and auscultation, and Bouillaud, renowned for his investigations in rheumatism and diseases of the the heart, are opposing champions, the former holding to solidism, the latter to vitality. Piorry, using his favorite plexiметer, invented by himself, will thump for hours over the chess and abdomen of a patient, and it is interesting to see his surprising discrimination in detecting disease, and marking the nicest shades of difference in sound. Bouillaud clings, with pertinacity, to blood-letting and other dogmas of his own, and is caustic towards opponents of his theories.

The hotel Dieu is the oldest hospital here, and one of the largest. It contains about one thousand beds, and receives medical and surgical cases. Trousseau, so well known in the annals of the diseases of the respiratory organs, is the chief physician, and Jobert the principal surgeon. Both are very celebrated. Probably no physician in France has a more commanding position than Trousseau. He is thoroughly posted, has great skill in diagnosis, and lectures with eloquence and ease of comprehension by Americans. Jobert is a dexterous operator, and noted for his simple but effective method of treating fractures, as well as for his

success in treating vesico-vaginal and recto-vaginal fistulas. He rejects the method of Sims and the suggestion of Bozeman. After the parts are properly brought together, he makes an incision on each side in order to relieve tension and facilitate adhesion, and uses a sort of a tape instead of silver sutures. He treats more of these cases of fistula than any man in Paris, and is very successful. Jobert is said to have risen from the ranks, but his irritability, roughness of manners, and profanity of speech, do not render him at all conciliating. The nonchalance in which he and Becquerel and most of the medical men here place female patients upon the back, and in the presence of eager eyes of crowds of students, thoroughly expose them, and with speculum in hand make application, often of hot iron, to the womb, strikes a medical stranger from North Carolina, at least, with some surprise, however much it may comport with the vitiated taste and depraved morals of the French nation.

At the Necker Hospital, a neat and well conducted institution, Civiale, now eighty years of age, still operates with undiminished quickness and gentleness, in his favorite speciality. He opposes the treatment of stricture by any means bordering on forcible dilutation, and in this respect differs from some of the eminent surgeons here, prefering, as he does, to remove it first by his cutting instrument, and then by the use of bongies. His wonderful manipulations and success in lithotrity are well known to the surgical world. His health is failing, and it is not likely that he can linger much longer upon the stage of active service.

Near by the Necker is the celebrated hospital for children. Here are constantly over seven hundred cases of disease, and they offer a rich field for medical observation. Children are admitted from two to fifteen years of age. Gymnastics are practiced with great benefit. About four thousand patients are treated here annually. The mortality is one in forty. Among the principal physicians are Bouvier and Roger, and surgeon Guerstaut.

There are two hospitals specially devoted to syphilitic diseases, the one Midi, for males, and the other, Lourcine, for females. They are both in the full tide of successful operation, and crowded constantly with patients. Creuveilier is one of the attending surgeons. Ricord, so long the distinguished surgeon of hospital Midi, has lately retired from duty there, in consequence of a law requiring that all hospital surgeons not full Professors, must retire from hospital service at the age of sixty. He is that old, although looking younger. He has the largest practice of any man in France, and wears decorations from every monarch in Europe. A splendid banquet has been recently given to him by the Faculty on the occasion of his retirement from hospital service. His successor at the Midi is M. Cullerièr. These hospitals contain six hundred beds, and average annually six thousand patients. A city law requiring all prostitutes to be examined frequently by a medical officer, and if found free from venereal disease, to receive a license for prostitution, may reduce these loathsome affections, but surely gonorrhœa and syphilis abound here, nevertheless, to a great extent.

The Hospital St. Louis, is mostly designed for cutaneous and scrofulous diseases. It contains a thousand beds, and in all probability, presents the finest field in the world for the study of these disorders. The bathing establishment here is on a large scale, commensurate with the great importance attached to medicated and mineral baths, especially of a sulphurous nature. The itch is cured in two hours by a persevering treatment of dry fricture and sulphur baths. Gibert and Cazenave are the chief physicians and Richet the main surgeon.

The Laraboisier is a large establishmnet, and the best arranged Hospital in Paris. It is comparatively new and combines all the modern improvements for heating, ventilation, exercise, &c. It is a general hospital. The lion of this place is Chassaignac, a large hearted and original man, who is making his mark as a surgeon. He is the

inventor of the well know ecraseur based on the principle of a chain saw, and which he uses with perhaps too much fondness, not only in diseases of the anus and rectum, to which it is mainly adapted, but upon many other regions of the body where most surgeons prefer to use the knife. His use of this instrument, as well as his treatment of abscess and deep seated inflammation by "drainage," as he calls it, I may hereafter allude to more in detail.

There are numereus other Hospitals, general and special, many cliniques for special maladies, and other smaller schools of theory and practic, where lectures and experiments are constantly going on, and a large number of eminent members of the profession, whose names I have not mentioned even, for the reason that my communication is, I fear, already too long. I only seek now to present a general idea of the medical resources of this wonderful and magnificent city.

The great attention given to specialties will strike the foreigner impressively, especially if he comes from a section where the condition of society and the circumstances of the profession have not favored specialties of practice. For a small sum you can get a course of valuable instruction on the eye, with cases, and learn the use of the opthalmoscope. The cliniques of Lichel, Desmurres and other eminent oculists, are very valuable. For a moderate sum you can also receive daily lessons at the Hospitals on any branch you choose, from the assistants of the Hospital surgeons and physicians. These assistants are generally young men of talent and are well qualified, and being anxious for distinction, they carry on these private courses with great benefit to their classes. They generally teach the methods and doctrines of their masters, and afford you every opportunity for examining the patients at your leisure, and of making out diagnosis. Although the knowledge thus acquired by these private courses comes second handed, I believe it is the very best means after all

for improvement. The young men here are pressing close upon the heels of their elders and masters, and though less renowned, they are often as well informed, and are not borne down by any of the practices of old fogyism.

The opportunities for dissection and for operative surgery are unequalled. At the Practical School of Medicine, and at Clamart, a large anatomical establishment, you can dissect, almost the year round, to your heart's content, and upon cheap terms. While at the latter place and in private rooms, the very best facilities exist for performing, several times yourself and of seeing performed, every operation upon the dead body. An operator, thoroughly qualified, is constantly with you.

Although the profession here seem to take more pleasure in presenting a pathological specimen than in reporting a cure, yet no one can fail to admire their astonishing devotion to medical science. Numerous medical societies exist and meet, some of them almost daily, for the advancement of medicine and surgery. Here the medical savans assemble and discuss questions relating to anatomy, physiology, pathology, diagnosis, surgery and medical practice. In this, and other ways, every report presented, every theory advanced, every instrument invented, and every discovery made, undergoes strict examination and thorough criticism by men not more devoted to science than learned in the profession, acute in perception, and skilled in logic and debate. Thus is talent developed, error exposed, and facts accumulated, which authorize conclusions and establish principles that are of great benefit to the profession.

Yours truly,

S. S. SATCHWELL.

Syphilis of New-Born Children.

BY J. B. HUGHES, M. D., OF NEWBERN, N. C.

To whatever epoch or circumstance the orgin of Syphilis may be assigned, it has probably existed, though in modified form, since the transgression of moral laws has been attended by subsequent evil. It was not till at the close of the fifteenth century, however, that it assumed the character, with which we have now become so familiar, when it exhibited itself in continental Europe, and startled the world with the terrors of its contagion, and its fearful ravages. Much had been written on the subject, but Hunter is the author who has given the first systematic treatise, to which we usually refer for his own, and the previous ideas of its nature and treatment. He availed himself of all the information which three centuries had furnished, and made great progress in the study of the disease—gave an unmistakeable diagnosis of the indurated chancre, but arrived at the conclusion that gonorrhea and syphilis proceeded from the same virus.

It is to the French School with Ricord leading the avant garde, that we owe so much for the light which has been thrown upon this disease within the last fifty years. Ricord, whose genius would rest with nothing less than actual experiment, inaugurated syphilography, and exploded the dogma that gonorrhea and syphilis had the same origin, and established the contrary fact beyond the peradventure of a doubt. With mathematical precision he arranged the laws which govern syphilis; the domain and career of each kind of chancre, and apparently left no feature of the disease unexamined; and as far as he could carry his experiments, established his doctrine in each particular*.

*Lettres Sur la Syphilis.—Ricrod.

Inspired by the enthusiasm of their leader, some of his associates and former pupils, and especially M. Diday of Lyons have pushed their investigations still farther, and excited grave doubts in the minds of physicians in regard to Ricord's idea of the unity of syphilitic virus; as well as that of Hunter, confirmed by Ricord, of the non-contagion of the secondary manifestations of the disease. Ricord himself proved, that the soft chancre was almost local in its effects; exciting bubo, but leaving the constitution uncontaminated; while the indurated chancre was followed, as by fatality, with constitutional infection; but insisted that both chancres had their origin in the same virus. M. Diday at the head of the dual School, said on the contrary, that the soft chancre always proceeded from the soft chancre, and the indurated chancre had as invariably an indurated chancre for its source. M. Fournier has given an admirable synopsis* of the actual state of knowledge on this question, and of the result of the experimentation of MM. Buzenet and Nadau. While the advocates of the dual School seemed to be gaining ground in public belief, M. Ricord announced the new idea, that all cephalic chancres (of tongue, lips, face and scalp,)† were of the indurated kind, and consequently followed by constitutional infection. At the clinique of hôpital du Midi, where Ricord presided, the soft chancre of the body presented itself in the proportion of three to one of the indurated kind. With this preponderance in favor of the former variety, why should these cephalic chancres always be of the latter? Unquestionably, M. Ricord has said, because the virus is the same, but the cephalic region is the peculiar soil for syphilis, and its anatomical characters convert the soft into the indurated chancre. Those of the dual School on the contrary, maintained that this region, while it would

*L'Union Medicale Tome xii. Nos. 19. 22. 25. 28. 35. 135.

†In the United States, these points are almost never visited by the primary sore, but the patients who present themselves at the hospitals of Paris seem to consider no points of the body sacred from its contact.

resist the *contagion* of the soft, had a peculiar election for the indurated chancre, and that this election was not singular, but an analogy could be found in other diseases; as the Pericardium showing a great election for rheumatism, while the peritoneum enjoyed almost an immunity from it; the hands being peculiarly liable to itch, while the face, back, &c., were almost never attacked by it, though it could be forced into these regions; and so on with other diseases.

To settle the disputed points, MM. Buzenet and Nadau had the courage to attempt inoculation on a great number and variety of patients; and their experiments are peculiarly interesting, as they belonged to the opposite doctrinal schools, and lead us inevitably to the same conclusion—that the virus of syphilis is dual. The pus of a soft chancre was inoculated upon the lip, and at the same time upon the thigh of a healthy subject; in both places a soft chancre resulted, and so on to each point of the disputed territory, face, scalp and all. But in every instance the thigh was similarly inoculated, with the uniform result of the re-production of the soft chancre, thus establishing the fact that a soft chancre could exist in these points as elsewhere. As if in verification, however, of their pre-conceived ideas, while the soft chancre was known generally to heal with much greater difficulty than the indurated variety, it was found uniformly that the soft of the head healed very rapidly, while that of the thigh run the ordinary course where it was not prematurely destroyed by caustic. Farther, Ricord's idea that constitutional syphilis was like variola, in the fact of one attack freeing its victims from a repetition of it, has been strengthened by their experiments. Patients who were suffering from constitutional syphilis from indurated chancre, were inoculated with pus from a similar chancre, and the result was uniformly negative. The same individuals were inoculated with the pus of soft chancre, with the invariable reproduction of soft chancre, which ran the ordinary course, without aggrava-

ting the constitutional malady. The followers of the dual school, then offer as their solution of the experiments, that the cephalic region enjoys a peculiar immunity from the virus of soft chancre; and that while a soft chancre will uniformly follow the *inoculation* of pus from a similar source, this region will resist the virus, so far as *contagion* is concerned. The experiments would seem to justify this conclusion, and when we have it more firmly established by additional investigations, its announcement will excite no more surprise than we now feel when gravely told that syphilis and gonorrhœa have not the same origin.

I have thought it necessary to introduce this exposé of the disputed points in syphilis, which have been fully discussed in the French Medical Journals, as they affect to a great extent, the transmission of syphilis by inheritance—the soft chancre not being transmissible, while the constitutional affection resulting from indurated chancre is almost invariably so conveyed. And also, that while much is known in regard to the syphilis of new-born children, it will require some enthusiast with courage and hardihood to make actual experiments to decide other points now in dispute. The following cases of syphilis in new-born children have, within the past three years, come under the care of my father, Dr. I. W. Hughes, and myself.

Case No. 1. June 11th, 1858. Bright mulatto child, girl, four months old. The history given of it was, that it was born at term, of full size, apparently healthy, nursed well, and gave no indication of disease till it was two months old, when its nose and mouth became sore, an eruption showed itself on its body, and it began to lose flesh. When presented to us, it was greatly emaciated, breathed with difficulty through its nose; its lips, mouth and nose filled with condylomata (mucous papules); on its forehead and scalp was an erythema of copperish color, while on the sclap there were also several ulcers. Condylomata were in the vagina, and associated with an ugly ulcer at anal orifice. The string of lymphatics along the inner border of

the thighs was a series of abscesses. The hands and feet bore the characteristic erythema, and several pustules; while the buttock was filled with pustules and tubercles, the spaces itervening between the eruptions being of copperish brown color. The lymphatics at the back of the neck and behind the ears were hard and swollen. Our inquiries elicited no information of venereal taint from the mother, but the child was put upon anti-syphilitic treatment with the happiest results. ℞—Hydrarg. Protiod. grs. ii to be divided into 24 powders, one to be given each morning. August 1st.—Child greatly improved—the abscesses along the thighs had been opened from day to day as necessity required, some of them had healed entirely, and those which had at first degenerated into ulcers, assumed a healthy appearance with diminished discharge. The erythematous eruption which had, in a great measure disappeared, left in many places a border of thin whitish scales. A slight iritis which had supervened soon after treatment was commenced, giving great annoyance to the child, at this time was entirely relieved. The Hydrarg. Protiod, which had purged a little, was modified by the addition of a small quantity of opium, and continued as before; a solution of Nitrat. Argent. gr. i. to Aqua f ʒ i. was applied to the ulcers. Nov. 1st.—All signs of eruption disappeared, the enlarged lymphatics were reduced to nearly their normal size, flesh increasing, skin clear and healthy, and the ulcer at anal orifice, and one on the scalp were all that remained of the disease. Same treatment continued. Dec. 1st.—Child perfectly cured, and is at this time three years old, vigorous, intelligent, and in the enjoyment of perfect health, having never since exhibited any symptoms of the disease. As a necessary explanation to this case, I must mention that, although the father of the child did not come under our care, I saw him and he was suffering from constitutional syphilis in the fullest sense of the phrase.

Case No. 2. Oct. 1859.—Negro child, boy, three months old. Born at term, with all the indications of health. At

the sixth week, its mouth became sore, diarrhœa set in, lost flesh, and an eruption showed itself, which had been treated by its mother without effect. When presented to us, its nose and mouth were filled with the condylomata; on its legs, feet and arms was an erythema, associated with pustules in the accustomed crescentic order. The aspect of the child was pinched and wearied, and its scalp bore a papular eruption of copperish color. We could get no fact from the mother in regard to syphilitic infection. Prescribed for child, Hydrarg. Protiod. grs. ii. to be divided into 24 powders, one to be given each morning. In four weeks every symptom of syphilis had disappeared; it regained flesh and was perfectly cured. It has not since had any return of the disease in any form, and is a fine, healthy child.

Case No. 3. August, 1860.—Negro child, girl, two months old. Born at term, with somewhat pinched and aged features, but otherwise exhibiting no evidence of disease. At its fourth week the inner border of legs and soles of the feet showed a pustular eruption. When seen by us, all the natural orifices, nose, mouth, anus, &c., were covered with condylomata, with the lymphatics of the neck, and behind the ears hard and swollen; its face bore patches of erythema mixed with pustules, which had in some places broken, and been converted into ulcers; its scalp was foul with scabs. The parents of this child had been under our care in July, 1858, for gonorrhœa, associated with indurated chancre. In September, the expected secondary symptoms exhibited themselves, which were apparently entirely relieved in May, 1859.

Some months afterwards, the mother became pregnant, and in July, 1860, was delivered of the child above described. The child was put upon the same treatment as the previous cases, but gave us no symptom of decided improvement for two weeks. In this space of time, the disease had reappeared upon the mother. Her occupations had prevented her realizing the necessity of taking medicine anterior to the eruption. She was now given iodide

of potash, grs. v. three times a day, and the mercury continued with the child. Both mother and child soon began to improve, and in November, there was no vestige of the disease in either, and it has not since reappeared. The child is healthy and growing rapidly.

Case No. 4. June, 1860. I was called accidentally to see patient, Mulatto child, girl, eight months old. Had been sick ever since it was two months old, when it began to lose flesh, and an eruption commenced to spread itself over the body. When seen, it was in the last stage of syphilitic marasm. On its face and scalp was an erythematous eruption with pustules and ulcers. The glands of neck and behind the ears were swollen; its body and limbs well marked with papules and pustules which assumed more or less the crescentic form. The inguinal glands had degenerated into foul ulcers; its body wasted almost to a skeleton. The liver was much swollen, and alternate diarrhea and constipation had prevailed; its life was nearly worn out. Prescribed Liq. Ammon, Acet. in doses of ten drops every two hours. Hyd. C. Mite, Pulv. Doveri, *aa.* grs. iv. to be made into twelve powders, one to be taken morning, noon and night. The child died two days afterwards—could learn nothing of the history of the case, so far as related to syphilis of parents.

Case No. 5. December, 1860.—Negro child, girl, seven months old. Had been born healthy and continued to thrive till its third month, when its skin assumed a dryish scaly appearance without characteristic eruption, and it lost flesh rapidly. When seen by us, the skin presented this dryish scaly appearance very forcibly, and the expression of face was like that of an old person, with muscles of the body greatly wasted; its bowels sometimes irritable, but generally regular, the appetite generally good, the lymphatics of neck and groin, and the tonsils were swollen.

The symptoms presented gave no such unmistakeable evidence of syphilis, as the history of the mother. She had borne three children previously by the same husband. Neith-

er he nor she confessed to a syphilitic taint. Each of the previous children had between the fourth and tenth weeks, broken out with an eruption of nose, mouth and anus, and the limbs had become filled with erythema and pustules. The first child had had large abscesses in the groin, and though each succeeding child had manifested less of the disease, it was the same in all. Each child had wasted and died before it was six months old. The child presented to us, was placed upon the same mercurial treatment as the cases mentioned above.

January 1861.—While the child seemed to be improving, it at this time had an attack of measles, which greatly taxed its strength, but left no bad symptom behind it. As soon as it was better, the mercurial treatment was resumed; and at this writing though the child is not entirely cured, it bears nearly the aspect of health—its skin has become clear —appetite good—swollen glands disappearing—flesh increasing and strength restored. The treatment is still continued, but will not be much longer necessary.

Case No. 6. March 1st, 1861.—Negro child, boy, three months old. Born at term, good size and healthy. He presented the following symptoms—a papular-squamous eruption which had commenced when it was five weeks old, existed on its scalp; at the inner border of limbs, and flexures of joints were occasional patches of erythema which had given place in some points to thin whitish scales; on the face and eyelids were pustules, and the scrotum and anus were filled with condylomata, and at the anal orifice an ulcer. The buttock was a mass of tubercles and pustules, some of which had degenerated into ulcers. Every inquiry in regard to syphilis was denied by parents; but a few days before I saw the child, the mother came to me for a sorethroat which was palpably syphilitic, both nipples were sore and fissured, and one of them had several mucous papules. She told me that the throat had become sore one week after the birth of infant —then, the nipples in a few days afterwards. Soon, the mouth of the child was likewise affected, and then followed

the general eruption of the body. The mother was given iodide of Potash, grs. v. three times a day, but no medicine was given to the child, letting it receive its cure through the milk. This treatment is still pursued, and I saw both of the patients yesterday. They are already nearly well. The throat of the mother gives her but little trouble, and the eruption of the child is greatly improved, having disappeared entirely from some parts of the body, and rapidly healing in the rest.

The history of these cases illustrates the great difficulty in deciding many doctrinal points in syphilis of new-born children. The parents in some instances, from ignorance or carelessness in noticing the primary sore, in others, from an unwillingness to acknowledge any improper conduct, deny every inquiry which would enlighten us in the ways of diagnosis; and if any confession is made, it is rather through accident, or ignorance of the direction to which our questions tend.

The cases presented for treatment constitute but a small proportion of those which have been infected, for a syphilitic mother may, and generally does abort a great many times, and at various periods of pregnancy, before a child is delivered at term. Observers have detected external manifestations of the disease as early as the second month of intra-uterine life, and there are many observations of this manifestation at the fifth and sixth months. This is a feature of the force of the disease, when it seems to exhibit itself with such violence as to prevent the fœtus from arriving at term, while in the cases reported in this article, which agree with other observations, the disease does not exhibit itself till the third, fourth, and up to the tenth week of extra-uterine life. We may then say of syphilitic children born at or near term, first, that some present a pinched cachectic look, which ought to excite suspicion of the disease at time of birth; that this cachexia may constitute the only prominent feature; while from mal-assimilation of nutritive matter the muscles waste, the skin becomes dry, and the

child may die with or without any cutaneous eruption; or if subjected to treatment may recover without the disease ever having manifested itself externally. Second, that the majority of cases presented, are reported to have nursed and looked well till the first or second month, when appetite may or may not begin to fail, child grow feeble and emaciated, and eruption show itself.

The skin and mucous membranes are generally the surfaces which give the first indication of constitutional infection in the child, as well as in the adult. There is no variety of eruption which they do not assume under this influence, and there may be several varieties mingled together; in fact, this is rather the prevailing rule of the disease; one subject often exhibiting vesicles, papules, &c., at the same time. The cases seen by us have generally exhibited on face and limbs, the erythema associated with pustules; on the scalp, pustules, scales and scabs; at nose, mouth, vagina, anus and scrotum, the condylomata; while on buttock, the pustules and tubercles have prevailed. This has been the most frequent association which we have observed, though of course there can be no precise limit affixed to any peculiar eruption when the whole surface is liable to assume either one or all of the eruptive diseases at the same time. The mucous membranes from their functions, being almost constantly moist, rarely show scales and scabs, but generally vesicles, pustules and ulcers. It is rare to observe diseases of the bones in new-born children suffering with syphilis, though they may exist. It is generally in later years that these and rheumatism show themselves. With treatment, these cases rapidly improve; without it, the disease becomes aggravated and generally leads to a fatal issue; though in some instances where the force of the disease has been enfeebled, and there is outside of the syphilitic taint, great natural vigor of constitution, the subject may live many years, being liable to rheumatism, and the repeated manifestations of the disease under sickness from dissipation, or reduced circumstances of living.

With regard to the period at which eruptions show themselves, we must say that pemphigus both in this particular and in result makes a class of cases for itself. Sometimes at birth, generally a few days after, it manifests itself, and other things being equal, the victims of it die very rapidly. M. Bouchut* has quoted the investigations of MM. Paul Dubois, Deville and others in their autopsies of syphilitic children, which have been made from the fœtus of four months up to child delivered at term. The thymus gland, the lungs, brain and liver have exhibited together or separately in each case, peculiar changes. In the first stage, there were mere points of congestion of a fibro-plastic character; further on, these had degenerated into abscesses. The thymus gland, especially, and more uniformly has exhibited these changes. In the lungs M. Dubois has found many abscesses, but in one case to which special value has been attached—a child delivered at term and filled with pemphigus—the lungs were found without abscesses, but had disseminated all through them patches of eruption which corresponded to that manifested externally.

The question which now presents itself is, what is the source of syphilis in new-born children? M. Ricord says, "There cannot be constitutional syphilis without a chancre or syphilitic mother or father." The first part of the proposition that a secondary sore is not contagious, as it will affect another branch of our subject, we will leave for the present, to revert to it farther on. The second part means, that syphilis is transmissible by inheritance, and I suppose there are few persons at the present day to contradict the fact. But the mother and father seem to possess different powers in this agency. In order to transmit syphilis to offspring, it is necessary that one or both parents should be suffering from *constitutional* syphilis, the primary sore not sufficing to cause such a result.

In regard to the father, it appears that when suffering

*Maladies des Nouveaux—Nés.

from constitutional syphilis, the ovum is infected by him at the moment of conception, and though the fœtus may be delivered at term, and not exhibit the disease for six or eight weeks after birth, it has really from the very first moment been diseased. If syphilis is contracted by father after conception, if the mother does not become affected the disease is harmless so far as the offspring is concerned. But a child "created syphilitic by the father can infect the mother during gestation." The force of the disease is here brought in question, as to the relative power of father affecting the offspring. Erichsen, in his Surgery relates a case of his own, where a gentleman suffering from constitutional syphilis, married and had a large family, none of whom exhibited any symptom of the disease. But this case is exceptional, and although we may believe that the father bears less danger of infecting offspring than the mother, still when he is suffering from constitutional syphilis the result will be, as a rule, that his children will come into the world syphilitic. In regard to mother, Ricord says that "inheritance by mother can proceed from a constitutional syphilis anterior to conception, or consecutive to an indurated chancre contracted during gestation." Thus the danger from mother extends during the entire period of pregnancy, except, perhaps, as M. Bouchut has expressed a doubt towards the eighth or ninth month. The only thing requisite is constitutional infection, for the mother to affect infants; and we may now ask, is a constitutional syphilitic mother who is carrying a syphilitic fœtus apt to infect husband? The mass of evidence is against the supposition, and M. Bouchut relates a case, where a woman who had been under his care for indurated chancre, married in a few months against his advice. She conceived, and a syphilitic child was born at its sixth month, but the husband did not contract the disease.

Here arises the important question of the power of contagion of secondary syphilis. M. Ricord has asserted that it is not contagious; but that in those cases where this has

appeared to be the fact, there has been error in diagnosis, and that what appeared to be a secondary manifestation was really an indurated chancre transformed "in situ," into an ecthymatous pustule or mucous papule. Melchior Robert, whose treatise* is drawn from the lessons of Ricord says in relation to this point; "It did not suffice to attribute to every primitive chancre the property of infecting the economy; it was necessary still to multiply the propagating means of syphilis in extending this power to secondary accidents. The bodies of unfortunate patients have been sown to profusion with the secretion of every variety of syphilides; they have inoculated one patient from another, from patient to healthy individuals; sometimes from mucous papule, sometimes from ecthyma; again from tertiary manifestations, and finally from the blood of syphilitics; and all that to arrive at the means of contradicting an opinion, which experimentation has a thousand times confirmed." There could be no more positive assertion than this, and yet, in 1857, M. Ricord, in his Oral lectures, expressed a doubt of this very point. The frequency of reports of syphilitic child infecting healthy nurse, and vice versa, and the medico-legal importance of the question have created much opposition to the belief of the non-contagion of the disease in this form. Without contradicting the theory entirely, it is certain that some modification of it is necessary; for a healthy mother carrying a fœtus infected with disease by the father, which has it in secondary form, is in her turn affected, and perhaps in an exaggerated degree, sometimes exhibiting it anterior, but generally consecutive to accouchment. The question of mother and child infecting each other when only secondary manifestations have existed, have been the principal obstacle to assent to this maxim of Ricord, for the great majority of adults with constitutional syphilis have failed to communicate it by contact.

Can a syphilitic child infect a healthy nurse? The prob-

*Maladies Vénériennes.

ability is that it can; but to do so, it is necessary that the disease shall be developed into eruption. M. Bouchut relates the case of an infant suffering in this way, who communicated the disease to three nurses consecutively, neither of whom had ever given any evidence of the disease anteriorly; of another nurse, who had a healthy child of her own, but contracting syphilis from a child which she was nursing, actually communicated it to her own child.

The means of transmission is generally thus: the child has mucous papules or ulcers on the lips, in frequent contact with the nipple of the nurse; soon upon it a similar eruption or it may be a fissure is developed, and then follows constitutional infection. And in some instances, the nipple is actually lost by the amount of fissure which surrounds it. Can a syphilitic nurse impart the disease to a healthy child? M. Ricord has denied this communication from nurse to child, except when the former is suffering from primary syphilis, and she by accident inoculates the nursling with the pus from primary sore, when secondary symptoms follow as a natural consequence. M. Bouchut while citing some cases to the contrary of this doctrine, is inclined to adopt somewhat the same views especially so far as infection through the milk is concerned. In the different analyses* of the milk, it is pronounced "a perfect aliment elaborated from the blood;" and while the different ingesta, excitement from rage, venereal desire, the menstrual flow, &c., &c., may affect its character in the proportion of fat globules, salts, &c., to a limited extent and thereby affect the nursling; yet there is no consistent deviation from the average standard from these causes. So in persons with phthisis, scrofula, syphilis, cancer, rickets, &c., the milk shows no consistent change so far as chemical test will detect. Yet no one will rationally doubt, that the milk elaborated from the blood of such persons, which nourishes the blood, muscles, bones, &c., of nurslings must in some wise differ from that of perfectly

*Carpenter's Physiology.

healthy persons. No one would knowingly engage a nurse for their child who had syphilis, scrofula, &c., because her milk exhibited by chemical test no derangement. In regard to syphilis, we see that in the father the spermatic fluid is so contaminated that it infects the ovum at the very moment of conception, and also, that a mother contracting syphilis after the child is conceived in health will infect it through the placental circulation. And why can not the milk of a syphilitic nurse, whose every secretion is affected by her syphilitic blood, convey the disease to a child which is nourished by it? There may be such vigor of constitution in some cases as to resist it, but in the great majority of cases the infant must suffer. We ourselves know a gentleman, born of healthy parents, all of whose brothers were healthy; but he was "put to nurse" to a woman who was afterwards discovered to be syphilitic, and he has all of his life suffered from rheumatism, and occasional syphilitic eruption, which would disappear under good health, but manifested itself again when attacked by any acute disease.

That the milk should give no evidence of the particular malady, ought to excite no surprise when we reflect that the syphilitic pus differs so little from healthy pus, that we have no certain means of distinguishing them, but by inoculation; and farther, that in the majority of cases where the mother is put under treatment, and the milk is freighted with the remedy for diseased child, chemical test will rarely detect any change in it. We have thus far considered syphilis in its secondary form, and it will be necessary now to examine its influence when passed into the tertiary. In this stage, the sub-cutaneous sub-mucous, fibro-osseous and muscular tissues, the testicle, liver, &c., have been invaded; that is, the poison has passed from the external to the deeper parts and taken firmer hold of the victim. Has its power of transmission increased with its progress? No. M. Ricord has said, that the disease passed into the tertiary stage is not transmissible by inheritance, but whatever manifestation may be made in a child born under such influence

will be scrofulous. M. Deville has observed that children born of fathers suffering from tertiary syphilis did not exhibit the disease, and while he believes the same in regard to mothers under similar circumstances, his observations have not been so satisfactory as to allow him to assert positive belief. The *force* of the disease is again brought in question here, and it must be confessed that grave doubts exist of the truthfulness of these observations. There is no doubt that secondary syphilis and scrofula are somewhat analogous in their manner of manifestation, and it is often extremely difficult to distinguish one from the other; but their nature is so different, that it will require yet much stronger proof to convince us, that though scrofulous parents do not give birth to syphilitic children, yet parents in the tertiary stage of syphilis will bring into the world scrofulous children. This question is important in a therapeutical point of view, for a remedy which is of great benefit in a case of syphilis may be positively detrimental in one of scrofula.

With regard to the treatment, it has become an established fact, that however much the non-mercurial school may cavil about the use of mercury in this disease in the adult, it is at least, a specific in syphilis of new-born children. The iodide is the best preparation of mercury, and may be given to infants in doses from twelfth to twentieth of a grain once a day; if no benefit is derived in the course of the day, the dose may be repeated twice a day. If administered to mother, it is best to begin with one grain to be increased if necessary to three grains per diem, this will affect the mother, and through the milk, the child. Mercury may also be used by inunction. Where it is not desirable to give mercury, the iodide of potash may be used in doses of five grains three times a day. If the disease is taken in time, when the child is not worn out, the prognosis is always favorable, but when it is in an advanced stage of marasm, its exhaustion and not the disease is the first point to combat. If this can be overcome, the syphilis will be manageable.

Whiskey as a Prophylactic in Typhoid Fever.

BY HUGH KELLEY, M. D., OF IRDDELL COUNTY, N. C.

The above announcement may excite surprise, incredulity or disgust in some; but all should, however, suspend their judgement until they have had an opportunity to test it fully. I by no means advocate the regular or even the occasional use of ardent spirits as a beverage by persons in health, for I hold that spirituous liquors are in their proper sphere only, when used and prescribed as medicines. Consequently, persons in health should not indulge, for by so doing, hey tax their systems beyond what they have a right to do. Very frequently the stomach, lungs and kidneys are over worked to dispose of what is not at all congenial to health, and particularly to the natural functions of those organs. What a very short period elapses betwixt the reception into the stomach of a portion of spirits, and efforts for relief through the lungs and kidneys, rendering it very evident that it is an intruder, all the energies of the system being called upon to dispose of this unwelcome stranger.

In the spring and summer of 1847, there was a great deal of typhoid fever in the neighborhood of Gold Hill (then a village containing a population of some eight or nine hundred inhabitants, white and black.) The fever made its appearance in the latter part of April, was of a very grave type, and was quite fatal among the blacks. The appointment of a nurse was almost equal to passing sentence of death on the one so appointed. Some four or five of them died. The whites suffered very much also, and a number of fatal cases occurred. In one instance, where some sixty or more negroes were employed by Barnhart Manney & Co., the number of sick was between thirty-five and forty; and, in fact, all seemed to be dispirited and languid.

Nurse after nurse dying, I feared that all might in a very short time be confined to bed, whites as well as blacks. A short time previous to this, I had read the history of of typhoid fever in an Irish Hospital, that had continued for some time, proving very fatal to nurses and physicians, and making it difficult to get those who were willing to take the places made vacant by disease. Only two or three nurses of the orignal corps were left, and not one physician. One of the newly appointed doctors, enquired of those nurses how they managed to keep clear of the fever, their answer was that they took their whiskey three times a day, and plenty of it; hence they did not fear the fever at all. The physician acting upon this hint had all the nurses and doctors belonging to the house to commence the use of whiskey, and he reported that from that time no new case occured in the house. Finding myself to be similary situated, I ultimately prevailed upon the company (all being temperance men) to try whiskey, by giving from half gill to a gill three times a day for an adult, and to children in proportion. I was much gratified at the happy change effected. From the day they began to give the hands, both white and black, their allowance of whiskey, not a single new case occurred, and the fever subsided in some two or three weeks, and all were up again.

I was so much pleased with this result, that I determined to try it further, and did adopt it in all the families to which I was called, where they had fever of this type, from this time, July 47, up to the time of my removal, December 54. In not one single instance did a new case occur, during that period, after the family (I mean those that were able to be up,) had commenced the use of this remedy. Since my residence in Iredell, I have pursued this same course and with the same success. Some persons in this section of country would not make a trial of this preventative, and all or nearly all of their families were sufferers. A trial was made in this neighborhood last sum-

·r, which resulted as all the rest had done. Col. A. has a

large number of negroes who had the fever among them in June last. It was of a malignant type, and after some three or four deaths, he procured a barrel of whiskey and commenced giving it as heretofore directed. The result was that not another case occurred on his farm. Its modus operandi in preventing this fever, I leave for others to examine; that it is a preventative, I am fully satisfied from an experience of thirteen years. When called to attend on cases of this fever, I advise all the family that are on foot to use this preventative, and to continue its use for sometime, at least until the sick are out and able to take exercise; or for two weeks at least after the fever subsides in the family. In many intances where several members of the same family were attacked at or about the same time, I have seen the remaining members of the household adopt this prophylactic, and continue to watch and nurse for several weeks in succession without one of them taking fever, which fully sustains the opinion formed of this agent. I suggest to all who nurse typhoid cases to use this medicine, as constant exposure to the fever, but for a very few days, may bring on an attack. That typhoid fever is contagious to a certain extent I presume none will doubt.

The Abuse of Obstetrical Instruments.

"The cacoethes operandi prevails too much in this country. It must be owned that this medlesome midwifery has the tendency to throw our noble art into discred it, and to give a semblance of truth to those pungent satires so often uttered against the profession. Moreover, the éclat consequent upon any operation is generally so great among the crowd, that he who saves most limbs is apt to be considered vastly inferior to him, who armed with catling and bistoury, literally carves his name on the temple of fame. Parva leves capiunt animos. The young, the inexperienced, the weakminded, behold, then, in a constant employment of instruments, a royal road to fame and success. Eager to seize upon any weapon in the brandishing of which they may attain the desired objects, the forceps unfortunately affords them full scope; and their victims, belonging to that sex upon which novelty and presumption seem always to exert a peculiar fascination, crowd around them ready to be sacrificed."

We commend the careful consideration of the foregoing extract from Keating's Ramsbotham, to those physicians who allow themselves to be seduced from the paths of morality and humanity, by the false reputation to be temporarily acquired by the unnecessary use of obstetrical instruments. We would warn them that the glittering exterior of dishonorable success, so often reflecting the images of proud triumph to the eyes of the multitude, will be found a mere tinsel-cover to self-reproach and conscious degradation. STUDENT.

SELECTIONS.

Practice of Medicine.

Clinical Lectures.

DELIVERED IN THE N. O. CHARITY HOSPITAL.

BY AUSTIN FLINT, M. D.,

Prof. of Clinical Medicine and Medical Pathology, in the N. O. School of Medicine.

LECTURE V.—PNEUMONIA.

Augmented weight of Solidified Lung in Pneumonia—Circumstances distinguishing this from other inflammations—Treatment of the disease when it extends over an entire lung.

GENTLEMEN:—I need not offer an apology for the subject of this lecture, although I have already treated of pneumonia fully in my didactic course at the college, and have considered, on several occasions, both in this place and in my remarks at the bedside, various points relating to the morbid anatomy, the clinical history, and the treatment of this disease. No apology is needed for recurring to this subject, for pneumonia is a disease important everywhere, but important especially to the medical practitioners of the South, in consequence of its far greater prevalence, and its prevalence in a severer form here than in the Northern States. Of the many practitioners who visit New Orleans during the winter, nearly all are interested in observations and discussions connected with pneumonia, more than in those pertaining to any other disease, and I am often asked to multiply my lectures on this subject.

Moreover, the subject of pneumonia is of interest, because,

by a kind of tacit agreement, this disease has come to be considered as a type of inflammatory affections generally; and the principles of therapeutics which are applied to this disease are considered as applicable to acute inflammation wherever situated. To a certain extent, this is undoubtedly correct; yet pneumonia presents some striking points of difference when compared with other inflammations. The inflammation is seated in a structure which is not a serous membrane, but which lacks the usual anatomical characters of a mucous structure; I refer, of course, to the membrane lining the air vesicles and the ultimate bronchial tubes. The inflammatory process here involves a solid exudation, which is probably derived from the blood coming from the right side of the heart, before becoming oxygenated, or, at least, at the instant of oxygenation. This peculiarity cannot possibly obtain in any other situation than in the air-vesicles and ultimate bronchial tubes. The exudation here never becomes organized, if it does elsewhere, as is generally supposed it may when it takes place on a serous surface. It is rarely converted into pus in this situation, if this conversion be possible elsewhere, as is generally supposed. The exudation does not remain as the tuberculous exudation does, in the same situation, but it is reabsorbed, often with great rapidity. Adhesion and obliteration of the cavities do not follow as in the case of serous membranes, but after the absorption of the exudation is completed, the pulmonary structure is intact, having received no appreciable damage. These are circumstances which are interesting, to say the least, in a pathological point of view.

During the present winter I have been interested in determining the increased weight of lung solidified by pneumonia. I have on the table before me the lungs from the body of a patient who died in a ward not under my charge, but the patient was seen by me before death, and the diseased organs have been kindly placed at my disposal. Over the entire right lung were presented the physical signs of solidification

prior to death, and you see that it is perfectly solid. The affected lung is dilated apparently to the utmost limit of its expansibility, by the solidifying exudation. When I blow into the trachea with a pair of bellows, it remains motionless, while the left lung, which is free from disease and collapsed, expands readily. Separating these lungs from their connexion with the heart, and weighing them separately, I find that the solidified lung weighs *sixty-six ounces* more than its fellow. Now, the weight of the right lung, in health, is somewhat greater than the left lung, but here is an enormous difference. The right lung has acquired a weight above that of health amounting to nearly or quite four pounds averdupois! To what is this enormous increase of weight due? Not to the presence of blood, for there is less blood in the diseased than in the healthy lung. It must be due to the quantity of solidifying exudation. Nearly or quite four pounds of the solid constituents of the blood, then, were withdrawn from the circulating blood in giving rise to the solidification in this case. I have weighed the lungs in other cases with similar results, and proportionately, where, instead of an entire lung, a single lobe only was affected by inflammation.

This increase of weight of lung affected with pneumonia, is a striking fact and highly suggestive. Is the withdrawal of this amount of the solid constituents of the blood of no moment, so far as concerns the condition of the blood, the functions of the body, and the state of the vital forces? Can the blood sustain such a loss without any dangerous consequence resulting from it? We know that it is not necessarily fatal, because patients not unfrequently recover; but is not this a source of evil and danger which is to be considered in practice? Do we not find in this striking fact an explanation, in part, at least, of another fact, viz: patients with pneumonia affecting the whole of a lung do not generally die by apnœa, but by asthenia? The function of the affected lung is, of course, suppressed, while the solidification continues, but the function of the other lung

is amply sufficient for the continuance of life. Patients do not necessarily experience even embarrassment of respiration from the solidification of an entire lung, but the pulse is apt to become frequent and full, the powers of life fail, and death ensues from exhaustion.

The history of the case which furnished this specimen was an illustration of the statement just made. Under a moderate use of opium, together with alcoholic stimulants, the respirations did not exceed sixteen per minute. There was no lividity of the face or prolabia. The pulse, however, was frequent and small, the patient was greatly prostrated, and despite the free use of stimulants and a sustaining diet, he sank more and more, and died from exhaustion.

The augmented weight of the lung in pneumonia is suggestive in another point of view. Notwithstanding the great amount of coagulated matter withdrawn from the blood, the coagulable constituent of the blood, viz: fibrine, does not appear to be diminished, but, on the contrary, increased. If blood be drawn during the progress of pneumonia, the amount of fibrine is found to be greater than in health; in fact, in this inflammation especially is the fibrinous element in excess. Does not this go to favor the hypothesis that the fibrine in the blood is excrementitious rather than the material for nutrition? And is not the greatly augmented quantity of the fibrine to be considered as expressing the waste of the tissues in this disease? This question is not without significance in relation to the modus operandi of certain remedies which clinical experience shows to be highly useful in the treatment of pneumonia.

There is no lack of opportunity, gentlemen, in this hospital, to observe cases of pneumonia in which the solidification extends over an entire lung. Examples are more numerous here than at the North, as I have shown by a comparative analysis of cases recorded in this hospital and at the hospital* in Buffalo. This fact explains, in part, the

*Vide Am. Jour. of Med. Sciences, Jan., 1861.

greater severity of the disease here, and the larger mortality from it. I have at this moment in my wards a patient who is just convalescing from pneumonia which has extended over the whole of the right lung, another patient who is nearly ready to be discharged, and another who is passing through the disease. Now, in these three cases the principles of treatment have been essentially the same. Many of you have observed these cases with me day after day, and have listened to the remarks which were suggested at the bedside. Let me state in a few words the principles of treatment which these cases have illustrated.

In none of these cases had the inflammation extended over the entire lung when the patient was admitted. It became thus diffused while the cases were under observation. Could this diffusion have been prevented by any plan of treatment? I am sorry not to be able to answer this question affirmatively. I have witnessed extension of the inflammation in cases in which different measures of treatment have been employed—such as bleeding, mercurialization, and the free use of antimony; and I am obliged to say I do not believe that we have adequate evidence of the effectiveness of any particular measure or measures in restraining the inflammation within the limits of a single lobe.

Blood-letting was not practised in either of these cases. But observe, gentlemen, I do not take ground against the employment of blood-letting in any case of pneumonia. I believe this to be an extreme and injudicious view; but I do believe that in the great majority of cases, even when the disease is observed from the commencement, blood-letting is not called for, either because it is contra-indicated, or the objects to be attained by it can be secured by measures less open to objections, viz: by cardiac sedatives and saline laxatives. In the cases to which I am referring, even these succedanea of blood-letting did not seem to me to be called for. The disease had existed in all some days

before admission, and the solidification had extended at least over an entire lobe.

Taking into view the history, the habits of the patients, the extent of lung affected, and the symptoms, the two following objects appeared to comprehend all that could be done to give the patients the best chance of recovery:

1. To place the patients under the influence of opium sufficiently to tranquilize the system—to render it, as it were, as tolerant as possible of the local affection, and to promote sleep. The objects embraced under this head are very important. When it is recollected that the disease kills by asthenia, all that we can do to obviate disorder, fatigue, and exhaustion, will be likely to increase the probability of recovery. Hence the value of opium in this, as in many other diseases. However we may explain the modus operandi of this drug, clinical experience shows its great value in the treatment of pneumonia. And it is to be borne in mind that in this, as in many other diseases, the system bears, without any narcotic effect, large doses of opium. These patients took, for several successive days, from nine to twelve grains of opium per day, without the least approach to narcotism. The good effects of this remedy must have been apparent to you in the diminished frequency of the pulse and respirations, the freedom from pain, the refreshing sleep which it procured, even while the local affection was advancing. I may repeat here, that it would be no objection to the use of opium, if it diminished expectoration in this disease, which it does not. The exudation in pneumonia does not go off by expectoration, but by absorption. One of the members of the class is now recovering from a recent attack of pneumonia affecting the whole of the right lung, and the resolution has gone on with astonishing rapidity; yet, in this case, during the whole course of the disease, there has been absolutely no cough and expectoration. The expectoration which usually occurs during the resolution of pneumonia, does not consist of the exudation into the cells, but mainly of mucus from the bronchial tubes.

I have offered reasons for the utility of opium; but you will bear in mind that its applicability in the treatment of the disease does not rest on the plausibility of these or any other reasons which may be given with a view to explain its utility, but on the conclusions drawn from repeated observations of its effect. It occurs to me to suggest, in connexion with the remarks which have been made respecting the probable derivation of the excess of fibrine from the waste of the tissues, whether opium may not be useful by limiting this waste; and, if so, may it not tend to limit the amount of exudation, and in this way, in fact, limit the extension of the disease? I throw out this idea simply as a casual suggestion.

2. The second object was to support the system by alcoholic stimulants and concentrated nourishment. These measures constitute the sustaining course of treatment of which I have spoken often in connexion with various diseases. The patients got an ounce of brandy at intervals varying from two to six hours during the progress of the disease, after the commencement of resolution; then the quantity was gradually diminished, and it was discontinued when convalescence was fully declared. Essence of beef and milk, alternately, at short intervals, constituted the diet.

Not many years ago, these measures, during the continuance of an acute inflammation, would have been deemed extremely hazardous. The utility of the sustaining treatment in pneumonia, and many other affections, has become so familiar to me that I have ceased to regard it as possessing any novelty; but from the frequent expressions of surprise and doubt by practitioners who do me the honor to visit my wards, I am reminded that it is a novel treatment to many, and that all do not find it easy to shake off notions which have become firmly fixed. I shall not now dilate on the subject. You have had abundant opportunity to observe for yourselves in the cases of which I am now speaking, and in numerous other cases, not only the innocuousness, but the apparent efficiency of the free use of alcoholic

stimulants and nutriment in certain cases of pneumonia, as well as of various acute affections. The safety and utility of these measures must, of course, rest on experience; but we need not be at a loss to understand, in some measure, why they are not only safe but useful. We have seen that in cases of pneumonia, in which an entire lung is solidified, sixty ounces of solid matter are withdrawn from the blood, and that the danger to life is from asthenia, or exhaustion. Hence, it is the great object in such cases to support the powers of life, and this is to be done by alcoholic stimulants and nourishment.

There is another consideration which has an important bearing on this point in the treatment. Pneumonia, in general, does not involve destructive lesions of the lung, even when it proves fatal. The lung structure is intact. The cells are filled with exudation matter which will almost surely be absorbed if life be sufficiently prolonged. A grand object of treatment, therefore, is to prolong life until resolution begins and progresses so far that, if serious complications do not ensue, the patient is safe.

In these remarks, gentlemen, I have had reference to cases in which pneumonia extends over an entire lung. This diffusion of the disease, as you well know, renders the affection one of considerable danger, while there is very little danger if the disease be limited to a single lobe and not complicated with any other serious affection. Now, in conclusion, let me ask you, how are you to determine that the disease is extending or has extended over an entire lung? We may suspect this from the symptoms, but we cannot dertermine it save by the physical signs. By means of these we can note, day by day, the advancement of the local affection; we can ascertain when and where resolution begins, and follow the progress of the latter up to the restoration of the healthy condition. We cannot do this under the guidance of the symptoms alone, although the latter are of great importance as regards the prognosis and the indications for treatment. Without physical explora-

tion of the chest, the existence of pneumonia would often be doubtful. It is not infrequently overlooked by those who trust to symptoms alone; and important complications, such as pericarditis, could not be discovered. I should do injustice to auscultation and percussion if I omitted to avail myself of all proper occasions to endeavor to impress their importance in medical practice.—*Am. Med. Times.*

Surgery.

On an Operation for Extracting a Stone from the Bladder by Urethrotomy and Dilatation of the Prostatic Urethra by Means of a Dilating-Staff.

BY JOHN WOOD, F. R. C. S.,

Assistant-Surgeon to King's College Hospital, Demonstrator in Anatomy King's College, Surgeon to the Lincoln's-Inn Dispensary.

THE author first called attention to some points in relative anatomy of the pelvic viscera, important in estimating the value of the different perineal operations of lithotomy. These were illustrated by a diagram embodying mean results of the dissection and measurements of wards of forty subjects, and by drawings of the alterati produced by development from the period of birth to ad life, taken from actual dissections of subjects at birth two years and a half, eight and a half, and sixteen ye and in the adult. He showed that the surface of the p næum lies in two planes, anterior and posterior, inters ing each other just behind the bulb of the urethra; that a line drawn from the middle of the central ten perpendicular to the posterior of these planes indicates axis of the bladder, when moderately distended, enterin at the urethral opening, and thus forming a safe guide the finger and instruments in the perineal operation lithotomy. In young children, this line is thrown more wards forming an obtuse angle with the posterior pla He stated that the nomenclature of the pelvic structure anatomical works had not had sufficient reference to their ual position in relation to the axis of the trunk in the erect ture. He showed that the proximity of the bulb of the ure to the anus and rectum varied, in the adult, from tl

quarters of an inch to an inch and a half. At birth, they are in close contact; below the age of puberty, from half an inch to three-quarters distant from each other. This was not sufficient room for the performance of Allarton's operation without considerable section of the bulb, which he considered objectionable, if it could be avoided. He attached much importance to the preservation intact of the deep layer of deep perineal fascia, where it is blended with the fibrous capsule surrounding the prostate, forming the grooved sheath of the levator ani muscle; and attributed to the median class of operations a greater safety against extravasation of urine above the levator ani, from their preserving this layer of fascia entire. In the lateral operation, it was fairly divided, together with more or less of the levator ani. He thought that if the levator were cut at all, it was better to cut it freely, to allow a free escape for the urine; but that it afforded a greater safety to the patient, in all cases in which the size of the stone rendered it practicable, not to open its sheath at all, but to proceed by dilatation from the urethral surface of the prostate.

The author then briefly passed in review the comparative merits and disadvantages of the lateral and median operations. The lateral operation had the advantage in celerity of execution, and, when practised with a free incision, in the more facile removal of a large or encysted stone, and in the free escape of the urine. In safety to the patient of adult years, however, it is inferior, from the impending dangers of hæmorrhage and pyæmia; by its extensive interference with vessels and venus plexuses; and from extravasation of urine into the layers of pelvic fascia above the levator ani, by the section of this muscle, its facial sheath, and of the prostatic fibrous capsule. When the limited prostatic incision is attempted it is more liable also to the accident of the finger slipping from the staff and forcing its way between the bladder and the rectum, especially in the yielding tissues of young children. In the free incision, on the other hand, accidental section of the ureter and oth-

or important deep-seated parts has had fatal results. The median class of operations, depending upon dilatation without section of the prostate and neck and bladder, has the advantages—that no cutting instruments enter the bladder or prostate, and that the incision is confined to aponeurotic structures in the most direct way to the bladder, and does not interfere with arteries or veins of any importance at all. In Allarton's method he thought the means of accomplishing the dilatation were insufficient in the adult, and that additional dilators or gorgets were objectionable on the score of complication and loss of time; that the bulb was freely cut, especially in children, and that the ejaculatory ducts were sure to suffer extensively from laceration by the probe tearing in the median line. He believed that section of the bulb diminished the chances of the patient by exposing him more to the dangers of pyæmia and hæmorrhage, or the consequent formation of a stricture. The incision also, in Allarton's method, was placed so far forwards, and was so limited in extent that great difficulty has been experienced in seizing and extracting a stone in a deep perinæum.

The author considered that our increased experience of the results of lithotomy in the adult had not as yet been followed by such a dimunition of its consequent mortality as might have been expected.

The operation he had practised was based upon the use of staff opening at the curve into the blades, which admit between them, through a perineal incision into the membraneous urethra, the forefinger of the operator, to effect the chief part of the dilation. The dilating power was increased by the pressure of the assistant's thumb upon a lever, which causes the posterior blade to turn upon its axis and press backward upon the base of the bladder, holding it firmly towards the perinæum, so as to prevent its yielding before the pressure of the dilating finger. With the slender model which was exhibited, and which was made for a child, the author had dilated in the subject many tough

adult prostates sufficiently to extract good-sized stones without injury to the levator ani or its sheath, or to the prostatic capsule. To make the preliminary incisions he used a very narrow-bladed knife. The form of incision he had practised was a lunated one, commencing two lines to the right of the raphé, just behind the bulb, and carried in a curve to a point midway between the anus and left tuber ischii, terminating opposite to the former. The membranous urethra was then opened (upon a groove exposed by the divergence of the blades of the staff) from the bulb to the prostate gland, a little to the left of the median line, as in the lateral operation, to avoid injuring the ejaculatory ducts. The lateral tension of the urethra rendered this very easy to do. The rest of the opening into the bladder was done entirely by dilatation between the blades of the staff. The patient, a boy aged nine years, was operated on in King's College Hospital, December, 1st. 1860. He had had symptoms of stone for one year. The dilatation was easily and speedily accomplished, the stone at once reached and removed, only a few drops of blood being lost. He made a rapid recovery; the urine passed by the meatus in the first week, and entirely by the natural passage in a fortnight, when he began to have control over its evacuation, which in the third week increased to entire command. In less than a month the wound was entirely healed. This showed how little injury was done to the neck of the bladder and muscles.

The author thought that the form of incision he had used had all the advantages of the median operation, with much more room to use the forceps, &c., without injury to the bulb, rectum, and ejaculatory ducts, and with an easy capability of extension, in case of a large stone, in the site of the lateral operation, but ordinarily without division of the deep layer of deep perineal fascia. The advantages of the dilating staff were: that the lateral tension renders a clean cut into the membranous urethra, and a fair introduction of the finger to dilate, easier to accomplish; that

the dilating finger is guided into the prostatic channel with the increased certainty of a conducting blade on each side, and is aided by the dilating action of the blades holding down the bladder, and preventing its yielding before the pressure of the finger, allowing it at the same time more complete tactile perception of the resisting tissues than can be obtained by the use of gorgets or dilators, which are also thus rendered unnecessary. The pressure of the separated blades guards against the passage of the finger between the bladder and pubes on the one hand, and the bladder and rectum on the other. Lastly, there is a more positive certainty of avoiding section of the prostatic capsule, and exposure to the deleterious action of urine effused into the pelvic fascia above the levator ani, than can be obtained by the use of the knife or gorget in the prostate cutting in opposition to the contracting levator ani.

Mr. Fergusson expressed himself pleased with the great beauty of Mr. Wood's diagrams; but the anatomy which they taught was no novelty. It was well known and taught by anatomists that the bladder in the child was much more out of the pelvis than in the adult; but he had not seen this part so well displayed before. He objected to the instrument invented by Mr. Wood as far too fragile in structure and too uncertain in its probable mode of action, and should prefer the old grooved staff. The prostatic and membranous portions of the urethra were often with difficulty dilated, as proved in the removal of calculi by the forceps; and, except in very young persons, Mr. Wood's instrument would fail to effect dilatation, and even in them its action could not be relied upon. He had no objection to any novelty which might be of service in simplifying or making more easy the operation of lithotomy, but this could not be done by the results of one operation or by experiments on the dead body. Mr. Fergusson then spoke of the importance of discussing the subject of lithotomy, which of late had not been done; while lithotrity had attracted much attention. Of late, there had been a strong

feeling in favor of the median operation of lithotomy; but this had been performed chiefly on children, in whom the lateral operation was almost uniformly successful: to show its superiority, it should be tried in the adults. Statistics in large numbers only could decide the question; but he saw no reason, at present, to prefer the mesial to the lateral operation.

Mr. Skey thought the Society indebted to Mr. Wood for his suggesting the employment of the circular incision round the anus, which, though it was not new, was not sufficiently considered as a valuable rule of practice, by which fewer vessels were wounded, and less bleeding produced. He agreed with Mr. Fergusson as to the inefficiency of the expanding power of the instrument invented by Mr. Wood. He considered the author to be a little too circumstantial in his anatomy for practical purposes, however fit it might be for the dissecting room.—*London Lancet.*

Remarks on Dr. Levis' Application of the Metalic Ligature to the Cure of Varicose Veins, with Report of Two Cases.

BY J. M. BOISNOT, M. D., OF PHILADELPHIA.

It is more with the object of contributing something that may substantiate an operation that the readers of the REPORTER are already acquainted with, than to advance anything new, that the following remarks are submitted. The number of cases of varix existing, and the previous want of an operation to safely effect a radical cure, make a method likely to be followed by success, and especially one that has simplicity and freedom from danger to recommend it, of great importance.

Varix depends for its existence upon two principal causes —an imperfect condition of the veins themselves, and anything retarding the return of the blood through them; the

first being due both to constitutional and local causes; the second mainly to mechanical. To be more explicit: in a person where the return of the circulation is unequal to the distribution, we have a cause acting upon the veins that will be followed by distension, not only in the main trunks, but also in the branches. Imperfection in the valves is what I refer to as local, and pressure the mechanical cause. Varix of the lower extremities is essentially a disease of the saphena interna; the continuous length and superficial position of this vein explain, in a measure, why this is so.

A derangement of the circulation must first affect the main trunk; afterwad the confluent branches. Independently of the cause, therefore, we say, as it is the saphena interna that first suffers so must it first be treated. The veins in this disease may be compared to streams which, under ordinary circumstances, are able to drain perfectly the adjoining land; but, when unusually filled, suffer, not only in themselves, but by communicating the force of the flood to tributary branches, damage contiguous parts also. To accomplish the desired end, therefore, we must force the current in a different direction, and away from the suffering parts; this the operation under consideration does most effectually; and, as it is simple and productive of little or no subsequent irritation, we see no reason why it should not meet with general approbation.

The success of the operation so far has been such as to leave no doubt of its efficiency, while its simplicity and freedom from danger tend strongly to recommend it. Subsequent irritation and inflammation seem to have been the principal sources of objection to previous operations, but this is overcome by the fact that silver wire is unirritating, and subcutaneous operations, generally, do not produce inflammation.

Nearly all the operations heretofore advised for the cure of varix have been opposed, or reluctantly performed, on account of their liability to produce fatal inflammation, and yet the idea that a certain amount of inflammation was in-

dispensable to effect a cure has been embodied in all of them. Now, it is this that is avoided by the operation under consideration, and yet the desired end attained, viz: *obliteration* of the veins; and this we maintain is accomplished, not by inflammation, but in the same manner that the umbilical vein and ductus venosus, deprived of their circulating current, become reduced to fibrous cords.

Case 1.—Mrs. R., æt. 42, came under my care in the autumn of 1859. She was suffering from a varicose condition of the veins of the right leg, and an ulcer near the external malleolus of the same. This condition had existed nearly three years, the varix having formed during a twin pregnancy, and the ulcer originated from a bursted vein. From the first she had been under medical treatment, but no operation had been performed. The usual palliative measures had been employed with the usual success.

I relied upon strips of adhesive plaster as the best means for exerting a constant and uniform pressure upon the part. The subcutaneous application of the metallic ligature had not been advised. As soon as I was informed of this operation I resolved to try it upon the case under consideration. In November last I placed a silver ligature upon the saphena interna, about three inches below the knee joint, and one upon a tributary branch, midway between the knee and ankle joints, in accordance with the directions already given in this journal. No dressing was applied to the ulcer, excepting dry lint, and at no time were the wires interfered with until their removal at the time of cure, which was seven weeks from the time of operating.

Case 2.—William G., æt. 63, called me to attend him November 9th, 1860. He was confined to bed by a very large ulcer, situated just above the internal malleolus of the right leg, dependent upon varicose veins. I was informed that the ulcer had existed since 1824, and had never been entirely healed from that date, being a duration of THIRTY-SIX YEARS. He was feeble, anemic, and unable to go about,

excepting from one room to another by the aid of crutches. The ulcer discharged a very offensive, ichorous pus, and presented an extremely indolent appearance and no disposition to heal. He had been under the care of physicians and surgeons of eminence, both in this city and New York, without material benefit to either the ulcer or the veins, although the latter had been subjected to the much lauded caustic treatment.

I proposed the operation of subcutaneous ligation, but was not allowed to perform it before the 28th of November. The points of ligation were the same as in the previous case, the ends of the wire were covered by strips of adhesive plaster, a compress of DRY, soft muslin was placed over the ulcer, and a roller applied from the toes to the knee. The bandage was removed every two or three days for the first two weeks after the operation, and the ulcer washed with soap and water. This constituted the whole of the local treatment. Constitutionally he received a nourishing diet, with quinia and iron. The irritation from the wire was at no time sufficient to produce more than slight redness at the point of entrance and exit. On the forty-sixth day after the operation, finding the veins, where ligated, quite solidified, and the ulcer entirely healed, I untwisted the wires and withdrew them. The cure seems perfect, and, at the present time, he is able to go about free from lameness and in good health.—*Medical & Surgical Reporter.*

Dislocation of the Femur Reduced by Reid's Method

BY B. F. WAGENSELLER, M. D. OF SELINS GROVE, PA.

On the evening of December 3d, I was hastily summoned to the country to see the daughter of Solomon R———, a stout, hearty, young girl, of about ten years of age, supposed to have fractured her thigh bone. Having arrived three hours after the accident, I made a careful ex-

amination, and found it to be a dislocation of the thigh upon the dorsum ilii. Fully satisfied in regard to the diagnosis, reduction was accomplished in the following manner:

The patient being placed upon her back, the leg was flexed upon the thigh, and the thigh gradually upon the body, at the same time directing the limb over the sound one, and giving to it a circular motion up over the pubis, when, whilst giving the leg the rotary motion, advised in this plan of reduction, the head of the femur easily glided into its natural position. The reduction was not accompanied with the "audible snap," usually said to occur in these cases, owing, no doubt, to the age of the patient, but the slipping of the bone over the edge of the acetabulum and into its natural socket was quite perceptible, and gave to the hand of the operator the sensation that all was right. The limb was now easily brought down alongside of its fellow, to the straight position. Simple retentive apparatus was used, so as to confine the injured limb to the sound one. A liniment was directed to be applied to the hip, with rest, and in the course of three weeks the patient was able to walk the distance of half a mile to school.

On account of the difficulties, and, in some cases, almost impossibility of reduction in these cases by the old method, we conceive the profession to be under lasting obligations to Dr. Reid for this discovery. That the method, with perhaps slight modifications, under certain circumstances, will apply to a large majority of cases of dislocated femur, we have no doubt, and to establish its value, we hold it to be the duty of practitioners to make a record as to the success or failure of the cases which may come under their immediate observation. Highly gratified with its result, in this instance, we shall not fail to resort to it again, should opportunity occur, and we hope to see the day when its utility shall be firmly established, and the old and more rude method by pulleys and counter-extension wholly superseded.—*Medical & Surgical Reporter.*

Obstetrics.

Puerperal Insanity.

Reported by Wm. B. Atkinson, Recording Secretary.

PHILADELPHIA COUNTY MEDICAL SOCIETY,
Wednesday Evening, Jan. 9th.

DR. REMINGTON, President, in the Chair.

(*Continued from page* 192.)

Dr. GEO. HAMILTON, observing that as one of the most important and difficult points in the treatment of "puerperal mania," was to procure sleep, requested the lecturer, or other members to state, in case of the failure of hyoscyamus, asafœtida, etc., (recommended by the lecturer for this purpose,) what have been the effects of opium, or its preparations, and to what extent they had employed it in these cases.

He said that in asking the question, in reference to the employment of opium, or its preparations, in the disease under discussion, he was fully impressed with the conviction, that the procurement of sleep was, undoubtedly, one great (if not the chief) point to be attained in the treatment of "puerperal mania." It had not occurred to him that opiates, or other medicines of similar character, when successful in producing sleep, were to be viewed as merely palliative, but curative in their action. He concurred in the views of the last speaker, and those of Dr. Darrach, as the important part performed by influences emanating from the reproductive system in the production of this malady. If these views be well founded, irritation, peculiar to these parts, and probably, peculiar in kind, acting upon the brain, and general system of nerves of a subject, hereditarily disposed to insanity, or of an extremely sensi-

tive and impressionable temperament, lies at the base of these attacks generally; or it is highly probable that many cases, possibly the greater number are dependent on moral emotion as their *primum mobile*, quickly bringing into action the sympathies of the generative system, not yet fully restored to its normal condition. In either event, the disease is evidently one of irritation, implicating especially the brain and reproductive system. The suddenness of many of these attacks, the depressed condition of the vital force so often seen, (the consequence of hæmorrhage, or other exhausting agencies during labor, or at the moment of parturition,) the sudden cessation, from time to time, of all the maniacal symptoms, and their equally sudden re-appearance, preclude the idea of inflammation, unless of a low grade, and consecutive in character, the result of protracted and excessive irritation. In the treatment of puerperal mania he had but little experience, the disease being comparatively infrequent. Bleeding generally, or even locally, was as a rule, no doubt justly proscribed. Purging, unless for the removal of accumulated or unduly offensive fecal matter, was, with perhaps equal propriety, rejected; as from the operation of various causes (an unwillingness to take food being a common one,) the tendency of the system is to a depressed condition of the vital forces, and finally, exhaustion. The supporting plan of treatment, as recommended by the lecturer, was, doubtless, the most useful. The difficulty of carrying out this measure, however, is often extreme, especially when the attack supervenes, as it often does, in from the sixth to the tenth day after delivery. When the affection is strongly developed, if the subject possess but moderate strength of endurance, and if, during or immediately after parturition, her vital force has been much impaired, not many days may elapse ere the signs of fatal exhaustion may appear. Independent of the want of nourishment from inappetence, or obstinate refusal to take it, there is nothing so exhausting as the loss of sleep, by night and by day, accompanied, as it

so often is, by the most violent muscular exertion, in attempts to leave the bed, or otherwise. In addition to this, the intellectual and other faculties of the mind are, under such circumstances, unceasing and inordinate in their action; thus increasing greatly the expenditure of vital power. The influence of such agencies in finally accomplishing the destruction of the patient is plainly seen in certain other somewhat analagous conditions of the brain and nervous system, as in "delirium tremens," or in particular stages and types of "idiopathic fevers."

These considerations, coupled with reflections arising from the perusal of detailed cases, and a very limited personal experience, had convinced Dr. H. that whenever opiates or other medicinal agents, were capable of procuring for the patient from four to six consecutive hours of sleep, and this for several days in succession, they would conduce more to the relief and ultimate recovery of the patient, than any other medicinal agency. In a large proportion of such cases, the patient, after sleep, is found much more tranquil and manageable, and likewise more willing to take food, which, if it be of a light, nutritious, and gently stimulant character, will do much towards recruiting and equalizing exhausted and perturbated vital force.

Dr. HAMILTON observed in reference to the remark of the lecturer, that he had known cases of "puerperal mania," in which sleep occurred as usual, without moderating, or apparently abbreviating the course of the disease. Dr. H. said these were evidently of a pathological character, exceptional to the class he had alluded to.

Dr. LEVICK believed that *sleep* was an important means of restoration to health. In some cases which had come under his observation, this was best obtained by means of laudanum enemata, and where these failed, by the application to the back of the neck of a blister, and by dressing this surface with a grain of the sulphate of morphia. Dr. L. would inquire of Dr. Worthington if it were not preferable that patients suffering from acute puerperal mania

should be treated at home, rather than subjected to the fatigue and exposure incident to their transportation to public institutions. The cases seen by Dr. Levick were most benefitted by wine whey, nutritious broths, and the use of opium as before mentioned.

Dr. WORTHINGTON replied that his practice was not to give opiates to a great extent, say one-twelfth of a grain of sulphate of morphia every two hours, or the one-fourth of a grain three times a day, etc.; he also employed other narcotics, as hyoscyamus, camphor, and ether and chloroform given internally.

Dr. HARTSHORNE asked if he used digitalis.

Dr. W. replied, very rarely.

Dr. REMINGTON inquired as to the use of counter-irritants.

Dr. W. replied that he seldom employed them.

Dr. LEVICK remarked that more was gained by the use of opiates *by the rectum or the skin* than in any other way, especially by the rectum.

Dr. CORSE remarked: The paper we have just heard read is peculiarly interesting, as it comes to us with authority, in consequence of the opportunity of extended observation of the writer. He had been struck with the observation that it is universally agreed there is no lesion peculiar to this malady. This is the conclusion we should arrive at *a priori*, and now takes the character of an established fact from the carefully-collected records of observations.

Hereditary tendency to insanity is, no doubt, excited by the pregnant state, for the system is often then profoundly affected in all its parts. The brain is especially the seat of disturbance in pregnant women, principally by sympathy directly with the uterus, and secondarily through some other organs, more or less disturbed by sympathy with it.

It is well known there is often increased amount of blood and increased action of the vascular system; but the occurrence of these is not always attended with cerebral symptoms, and if so, they are not those of insanity.

Where brain symptoms have presented themselves in consequence of pregnancy, he thought a large majority of the cases have been from anæmia. We cannot be surprised at this when we remember how very prone the stomach is to become preternaturally irritable at this period; and as vomiting usually results, the patient is thus deprived of the supply of the material for producing the increased amount of blood now necessary.

Deficient supply of blood to the brain is universally acknowledged to cause many of the cerebral symptoms which stimulate those occasioned by organic lesions.

The blood may be altered in quality, by pregnancy, from some organ being temporarily thrown into disorder—for example, the liver; and one case of this kind he attended which obstinately resisted all other remedies, until he prescribed calomel and Dover's powder. A copious discharge of bile followed these medicines, and entire relief. During the continuance of the portal disturbance, cephalic symptoms were prominent and distressing, the patient often having delirium, incoherent talk, perverted sensations, and extreme despondency.

Other cases have been presented where the kidneys were affected, and the secretion of urine greatly diminished, so that the blood became from this cause of so disordered a state as to produce cerebral symptoms; cups to the back gave relief.

The general nervous system, in many cases, becomes greatly disordered and thrown into that state commonly known as hysterical. Here either mania, spasm, and convulsions may supervene and have a temporary duration, or they may all occur in the same individual successively. Co-incident with these, the most distressing symptom is very obstinate wakefulnes. For all these symptoms he had found great advantage from the free use of opium; the medicine is well borne, and larger doses than usual are necessary; now and then irritability of the stomach is such that all things are quickly ejected. In such cases its admin-

istration by enema has been followed by satisfactory results.

Dr. WORTHINGTON said he did not consider that sleep procured by large doses of opium in insanity was incurative; hence he did not give the remedy for its sleep-compelling powers only, but in moderate doses to tranquilize the system, while he used other means to remove the disease. He did not expect, when an insane patient awoke from sleep, that his condition would really be changed for the better, so far as the diseased state of the organs are concerned.

Dr. TURNBULL, in a practice of sixteen years, had seen four well-marked cases of puerperal insanity, or mania, as it is sometimes called.

The first case, Mrs. M., aged 32, was delivered, Nov. 9, 1859, of her third child, a large male, but owing to a careless nurse, she was exposed to cold, which ultimately terminated in mammary abscess. A solution of extract of belladonna, etc., having been applied to the breast without benefit, ultimately poultices had to be used and free incisions made.

On the 16th day, her pulse became rapid; she had no sleep; the face flushed; there was pain in the forehead; she manifested great aversion to her nurse, mother, and husband, with wild glances around the room. She said they were going to kill her, etc. Even when her baby was brought to her she took no interest in it. Fearing phrenitis, she was leeched, cold ice-cloths applied to her head, with mustard foot-bath, and purgative and anodynes by the mouth. Pulv. opii, camphor, and hydr. proto-chlorid, were administered without benefit. This state of things continued for almost a week, when it was proposed to her friends to send her to the hospital. Before this was done, Prof. C. D. Meiges was consulted, who recommended the use of Battley's sedative solution of opium, forty drops in thick starch water, as an enema at night. The first night that the anodyne was employed by the rectum, she became comparatively quiet, and, by repeating it for several nights,

she slept well, took nourishment, and gradually improved, so as to be discharged cured.

Dec. 10. Two other cases were treated in the same manner, and a third one by a friend, all termnating in health. The following case terminated fatally:—

Mrs. John T., aged thirty-eight years. When in her ninth month of utero-gestation, her husband died, (January 1860,) leaving her poor, after having, while he lived by his labor as a clerk, supported her comfortably. Her mind was naturally weak and dependent. She was sure she would die. Dr. T. endeavored to reason with her that all was right; but hints by designing persons that the child which was to be born was not her husband's, distressed her much. By the 22d January, she had irregular pains, which were relieved by anodyne enemata; but she was not confined until February 8th. With the exception of the labor being tedious, there was nothing abnormal. Her lochia were natural; lactation the same.

Dr. Turnbull suffering from indisposition, Dr. Atkinson took charge of her for a short time. She again became indisposed, and he found her, (March 9,) quite out of her mind, and she would not remain in her house. The sedative treatment, with counter-irritation by blisters to the nape of the neck, was employed, and her friends advised her removal to a friend's house, where she had more agreeable society. She recovered in April, and went home, nursed her baby, which she had entirely given up, took food, which before she would hardly touch, because she said it contained poison. During her illness, she constantly heard persons calling her, and had other hallucinations. The symptoms all disappeared, so that her friends were congratulating themselves that she had entirely recovered. In May, however, all her symptoms returned with greater violence, and she became a complete maniac, at times furious, so that three persons could with difficulty restrain her. She slept none, ate nothing, and was nourished entirely by injections of soup, etc. She would have injured

her child if trusted with it. Under these circumstances, she was sent to the Pennsylvania Insane Hospital, (May, the 25th,) where she remained without the slightest improvement until October, when she died. There was no post-mortem examination. Dr. Turnbull carefully examined the body when sent to the city. There was great emaciation, loss of one eye, having had ulceration of the cornea before going into hospital, and, from all appearances, she had died from marasmus or pthisis. While in the hospital, she had profuse expectoration, but no cough. Her friends who visited her found the odor of her breath almost insupportable; she had a profuse eczematous eruption, which was first all over the body, but had afterward receded. Her two children have suffered from the same disease.

In the case just related, both the eyes and ears were affected. But the ear is the chief organ of the senses, that is apt to become affected in the insane. Few become blind; but, should the eyes become diseased, it is very difficult to effect a cure, as they resist the proper applications. In chloroform and ether, we have agents by which any resistance, may be entirely overcome. While Resident Physician of the Philadelphia Hospital in 1845, Dr. Turnbull had charge of the insane wards, and found that many of those who were actually not deaf were troubled with difficulty of hearing, tinnitus aurium; but optical hallucinations, were rare, compared with those of hearing. It is a well-known fact that, even in the soundest state of our faculties, we are more liable to be deceived by the ear than through the medium of the other senses. A partial obstruction by cerumen or catarrhal inflammation of the Eustachian tube will cause the patient, so affected, to hear the bubbling of water, the blowing of steam, ringing of bells, or sounds of various musical instruments.

In concluding his remarks, Dr. Turnbull alluded to another cause of insanity: the cessation of the menstrual discharge, or, in popular language, the change of life. He has known this to produce a form of puerperal mania very

difficult to cure. A patient recently under his charge had had three attacks; the first was successfully treated at the Pennsylvania Hospital; during the others she was under his care. The chief indications are fulfilled by keeping the patient amused or interested by change of scene, attending carefully to the digestive apparatus by tonics, controlling the pulse and nervous symptoms by the administration of the tincture of veratum viride in ten-drop doses three times through the day, and the administration of morphine to insure sleep. If the opium should constipate the bowels, magnes. sulphas will relieve this without debilitating the patient. He also employed freely, deep cupping along the spine, especially over the lumbar region, frequently repeated with the happiest effect in relieving the pain and the feeling or desire for something hard to be placed against that region. After cupping, the liniment. saponis with ol. Croton. (℥j to f℥,) is also a useful mode of counter-irritation, and can be kept up until the patient is entirely convalescent.

Dr. HENRY HARTSHORNE suggested that the analogy which some cases, at least of puerperal mania, present to mania a potu, furnishes a reason why sleep might be expected to be in such cases, to some extent, curative. In delirium tremens, he believed that a long and sound sleep was curative in a large majority of instances, whether the sleep were spontaneous or was obtained under the influence of narcotics. The manner of using hypnotic medicines, which he preferred in obstinate insomnia, was the repeated administration of moderate doses at short intervals; a quarter of a grain of sulphate of morphia or a grain of opium, for example, every two hours, or sometimes even every hour. He had never ventured to go beyond this, or even to persist in such doses for many days at a time.

Dr. NEBINGER had the good fortune to have met with only two cases of puerperal mania; one occurred before and the other after delivery. Several years ago, while driving about in pursuit of his professional duties, he was

called to, and invited to go into a house near by and see a woman whom the stranger said was "crazy." He visited her, saw she was pregnant, and learned from those about her that she had nearly reached the close of her term. She had been complaining of bad health for several days. Had been distressed with headache, restlessness, and unable to sleep. It was her first pregnancy. For the relief of her headache, without medical advice, she had been freely bled. At the period when Dr. N. saw her she was pale, anemic, full of movement, and talking almost incessantly. There was not any febrile disturbance. He diagnosed puerperal mania. To compose her he gave her sulphate of morphia in one-sixth of a grain doses every two hours. This treatment was continued for two days, during which time the mania became aggravated. At the expiration of the two days he gave her *one quarter of a grain of sulphate of morphia every hour*. To watch the effect, and to the end that she might not take more than was necessary to produce the desired result, he remained with her all night, giving the medicine and observing its action. When she had taken two grains of the sulphate of morphia, she became drowsy. The medicine was then discontinued, sleep soon followed the drowsiness, and when he left in the morning, she was wrapt in slumber. From that morning her recovery commenced, and progressed until she became perfectly sane.—In the lapse of a few days her labor came on, and she gave birth to a living, healthy child. The cause of Dr. N. remaining all night and administering the morphia, was that she was surrounded with unintelligent persons, and he feared to trust the administration of the opiate in large doses, at short intervals, to them, lest they might give more than was necessary; and thus, if they did not damage the woman, they might destroy the fœtus.

The other case referred to was that of a German woman. She had been delivered by a midwife. About seven or eight days after her accouchement he was sent for. She was then suffering from remittent fever. The locality

where she resided was a newly laid out part of the city, low, and imperfectly drained. She recovered from her attack of remittent fever. About two weeks after she had been about her room, before, however, her vigor had been restored, she was seized with fearful forebodings; would cry without any apparent cause; became melancholy, taciturn, and could not sleep. These conditions having developed themselves, Dr. N. was invited to see her again. He found her pale, feeble, without appetite, suffering much mental disturbance, and in general bad health. Regarding her mania as the result of the unhealthy condition of her physical system and the abnormal manner in which most of the functions of her economy were carried on, he did not give her special treatment for her mania, but directed his efforts mainly to the restoration of her general health. Two months and more were consumed in this work before her health became much improved; as, however, her appetite increased and her digestion became better and the red corpuscles multiplied, her mental malady was relieved and shortly after she became physically well; her mind ceased to be unsound. The treatment in her case was the use of such medicines as were calculated to restore the digestive apparatus to health; to normalize the secretions, increase the red corpuscles in amount, passive exercise in the open air, and her removal from her home to her brother's where the hygienic conditions were much better than at her own home. Thus, then, from these two cases, it would appear that there cannot be any plan or system of treatment for puerperal mania, which is adapted to every case, but that each case requires a treatment peculiar to itself, and that the condition of the patient will be suggestive of the treatment required. Symptoms and conditions, not names, must point us to the remedies.

Dr. TURNBULL had employed the lactucarium and other narcotics freely in one case by the mouth with but little effect, and was surprised at their rapid influence when given *per rectum*, owing, no doubt, to bountiful supply of

nerves developed during gestation, as shown by the beautiful dissections by Dr. Lee, which the speaker has seen in St. George's Hospital, London.

Dr. WORTHINGTON said that he saw every day cases of ordinary insanity in which the patients slept regularly without narcotics, and the disease, notwithstanding, persisted for months. So far as these cases were concerned sleep was not curative.

In reply to Dr. Hartshorne and his supposed analogy between delirium tremens and acute delirium, he would say, that we all know the former to be one of the most curable diseases, in fact some physicians say it requires no treatment and will recover itself with proper care, while it is equally true that acute delirium, to which he referred in the paper he had read, is one of the most dangerous diseases to which the human frame is subject. Dr. Marcé says it is maniacal excitement carried to its utmost limits. If this were true we might make the attempt to quell it by narcotics, but he did not think the opinion was generally received by pathologists. Calmeil shows by his recent researches, that it is an inflammatory condition of the cortical substance, and with this view of its pathology we would not expect opium to execute a curative influence.—

Therapeutics.

Persulphate of Iron as an Internal Hæmostatic.

Read before the Society for Medical Improvement at the Long Island College Hospital.

BY ARNOLD HALLET, M.D.,

Physician to the Hospital.

THE object of this paper is to bring to notice the great superiority of the persulphate of iron over any other known hæmostatic agent, particularly as an internal remedy in passive hemorrhage from the lungs, stomach, or any other viscus.

A good deal has been written lately upon it as a local styptic, but I am unable to find that it has been much used as an internal remedy. My attention was first directed to it by Dr. Dudley, in a case of hæmatemesis, and from its prompt action in that case, I have been induced to prescribe it in a number of other instances, and thus far have not known it fail, in promptly arresting hemorrhage in any case.

To illustrate the good effects of its use, I will detail very briefly a few cases.

CASE 1.—Mrs. S. æt. 22, of rather delicate constitution, habitually constipated, and suffering from indigestion, was attacked January 17, 1860, after syncope, with vomiting of a quantity of matter resembling coffee-grounds in appearance. Ice was ordered internally, with Warren's styptic every three hours, which controlled vomiting for about twenty-four hours, when she was again attacked with syncope, followed almost immediately by the same characteristic vomiting, with great prostration. Ordered sinapisms to the feet, as they were cold, and five grains of gallic acid every

three hours. After this there was no more vomiting for about the same period, when she was again attacked, as in the previous instances; each time becoming more and more exhausted. To clear out the contents of the bowels ten grains of calomel were now administered, and the same remedies were continued, everything being taken icy cold. But it was all of no avail, the hemorrhage still continued, and finding that I should lose my patient, I suggested a consultation, which being acceded to, Dr. Dudley was called in. The case was diagnosticated as one of congestion of the stomach, consequent upon a deranged condition of the functions of the liver. I omitted to state that her evacuations were of the same black appearance. She was regular in her menstruation. Dr. Dudley suggested the sol. of the persulphate of iron, to be administered in fifteen drop doses every four hours, which immediately arrested all unfavorable symptoms, and there was no return of the vomiting after the first dose.

About two years previously, while in the country, after an attack of syncope, she had quite a free black dejection, which was repeated at short intervals, and without any other symptoms than those of prostration; she was taken to her bed, where she remained for some weeks, and from that time her health has been rather delicate, suffering constantly from indigestion. At present she is in a rather better state of health than usual, and has had no return of hemorrhage.

Case 2.—On the 20th of last November I was called to see a child four years of age, in consultation with Dr. Barber. About three weeks previous it had an attack of scarlatina, and everything was going on well, when suddenly she was seized with hemoptysis. The usual remedies were prescribed, but they were of no avail, the child continuing to expectorate quite freely bright arterial blood, accompanied with a rapid sinking of its physical powers, and great dyspnœa. I suggested that four drops of the persulphate should be administered in water every three hours, which

soon entirely controlled the hemorrhage, but the child died of exhaustion three days after. Soon after the first dose the respiration became easy and the cough rapidly subsided.

CASE 3.—Miss T., æt. 13 years, of vigorous health, was attacked with scarlatina on the 5th of last November. She passed nicely through the first stages of the disease, but about the 15th, when desquamation of the cuticle had commenced, observing a little puffiness about the eyes, I immediately examined her urine, which was very scanty, and resembled in appearance water-gruel. Upon boiling it was found to be highly albuminous. A brisk cathartic was administered, and cream of tartar water ordered to be drunk freely. Stimulating applications were applied to the region of the kidneys; on the 18th, three days after, her urine was a little more free, but, with the albumen, it contained a large quantity of blood. Skin hot and dry; tongue furred; pulse not much accelerated. Ordered spir. mindererus. 17th.—Water increasing in quantity, but no dimunition in the amount of blood. Leeches were now applied over the region of the kidneys. 22d.—The quantity of urine excreted was about normal, albumen very much diminished in quantity, but the blood continued as free as ever. Ordered four grains of gallic acid every four hours, which was continued for three days—the bowels being kept open by an occasional dose of the comp. powder of jalap. 15th.—Albumen pretty much disappeared, but the blood still persisted. I now had recourse to the persulphate, and in twenty-four hours the blood had entirely disappeared from the urine; It was then omitted, but the next day there was almost as much blood as ever. A few more doses, however, soon controlled it, and there has been no return of it since. She is now, I am happy to say, convalescent. In administering the persulphate of iron care should be taken to have it largely diluted, and not to give too much at a time, as from its astringent effect upon the mucous coat of the stomach, it is apt to be immediately ejected. I would also state, that I have used it in profuse menstruation with a like

happy result. I presume that it checks internal hemorrhage by exerting its astringent principle upon the capillaries, and also in hæmaturia, by correcting the alkaline condition of the urine, which is said to excite bleeding by its irritating qualities. Inflammation should preclude its use, until it is overcome by appropriate remedies.

In Dr. Hamilton's patient, who was operated upon in this Hospital four days ago for vesico-vaginal fistula, profuse hemorrhage came on yesterday, from the bladder, so much so that quite large clots were expelled through the urethra, and the patient began to sink from loss of blood. I understand from Dr. Lynch, that all other means having failed to arrest the hemorrhage, recourse was had to the solution of the persulphate of iron internally, when the bleeding stopped. But whether "post hoc, ergo propter hoc," is true in this case, I am unable to say.—*American Medical Times.*

4. *On Indian Hemp, particularly in relation to its property of producing Sleep.*—Dr. FRONMULLER first employed the Indian hemp in the case of a phthisical patient in the year 1850, and since that time he has devoted himself to the especial study of the properties of this substance. The result has been the production of a treatise founded upon the clinical observation of no less than a thousand cases in which Indian hemp was administered. This plant has been very much extolled by many practitioners in various countries, but has lately fallen into disuse, owing to the supposed uncertainty of its operation. The discredit attached to it is attributed by Dr. Fronmüller partly to the contradictory statements published concerning its operation by various writers, and partly to the difference in its effects in the Eastern hemisphere compared with those observed in Europe. The Indian hemp of India and that grown in Europe present the same external form, but they differ in the relative proportion of narcotic resin which each contains, and which is the active principle of the

plant. It appears that the amount of resin depends not only upon differences of latitude, but also upon the depression or elevation of the regions where the plant is grown. Chemical analysis has discovered that the Indian hemp contains gum, bitter extractive matter, albumen, chlorophyll, ethereal oil, and a peculiar resin. This resin is called *cannabin* by some writers, and forms six to seven per cent. of the dried plant. The ethereal oil has been obtained by Martius only in small quantity; it is of a slightly yellowish colour, of a peculiar ethereal camphor-like smell, and an aromatic astringent, and afterwards bitter taste. The preparations of Indian hemp hitherto employed are the powdered plant for pills or powders, resinous extract of hemp in powders or pills, tincture of the resin, and emulsion.

With regard to its application to the practice of medicine, Indian hemp may be considered valuable as a tranquillizing antispasmodic drug. It has been employed with favorable results in tetanus and trismus, cardialgia, rheumatism, and in some mental diseases. Of 1000 cases in which this drug was administered by Dr. Fronmüller, 552 were males and 448 females, and the patients were of various ages, from one year to fifty and more. The principal diseases of the patients were tuberculosis, inflammation, surgical diseases, rheumatism, diseases of the eyes, nervous diseases, and dropsy. The greater part of the cases were treated by the spiritous extract prepared by Merk in Darmstadt; but others were treated by the extract prepared by the late Jacob Bell, of London. It is to be observed that all the observations were made on cases in which there had been no sleep for several nights, and in which the continuance of sleeplessness was to be anticipated unless some narcotic was employed.

Out of the thousand cases it was found that the narcotic property of the hemp was completely developed in 530, partially in 215, and little or not at all in 255. With the extract of Indian hemp the best effects were produced 145

times with a dose of 12 grains, 64 times with a dose of 8 grains, 63 times with a dose of 10 grains, 35 times with 16 grains, 22 times with 3 grains, 17 times with 2 grains, 15 times with 14 grains, 14 times with 20 grains, 13 times with 6 grains, 12 times with 5 grains. The period of falling to sleep, and the duration of sleep in the cases, are numerically recorded by Dr. Fronmüller, and also the number of cases in which unfavourable results ensued on the day of taking the drug, or on the next morning. Comparative observations were also made with morphia in cases where the Indian hemp had failed. Out of 29 cases in which Indian hemp had produced no effect, sleep was produced by morphia in 24. The dose of morphia was in general rather a strong one—from one-sixth of a grain to 2 grains—in order to induce sleep. In the remaining 5 cases the morphia produced no effect.

The conclusions to which Dr. Fronmüller arrives as the results of his observations are the following: 1. That Indian hemp, among all the known medicines which cause stupefaction, is that which produces a narcotism most completely supplying the want of natural sleep, without occasioning any great excitement of the vascular system, without special stoppage of the secretions, without the supervention of unfavorable consequences, and without subsequent paralysis. 2. That Indian hemp, on the other hand, is not so strong nor so certain in its operation as opium. 3. That Indian hemp may given in all acute inflammatory diseases and in typhus fever. 4. That it is worth a trial to alternate the Indian hemp with opium in cases where the latter fails. 5. That the best mode of administration is the alcoholic extract in small pills which contain an addition of the powder of the Indian hemp. The lowest dose for producing sleep may be estimated as eight grains given in pills of one grain each.—*B. and F. Med. Chir. Rev.*, 1861. from *Vierteljahrschrift für die practiche Heilkunde*, 1860.

Iodide of Ammonium in Constitutional Syphilis.—M. Gamberini, of Bologna, has, from an experience of fourteen cases, arrived at the following conclusions regarding the use of iodide of ammoinum in constitutional syphilis.

Iodide of ammonium is indicated in all cases where the iodides of potassium and sodium are employed, and produces a rapid cure. In syphilitic cases, the following results were obtained: five were cured in a fortnight, three in three weeks, five in a month, and one in five weeks. In the last case the medicine was not well tolerated, and had to be given in small doses.

The dose is from two to sixteen grains daily; the last named quantity is but rarely required. Intolerance is an exceptional occurrence. Externally, iodide of ammonium has been usefully employed in frictions (three grains to an ounce of olive oil), in cases of nocturnal syphilitic pains of the muscles or joints.

Intolerance of the medicine is denoted by a burning sensation in the throat and heat in the stomach; these rapidly cease when the medicine is suspended for a day or two.

M. Gamberini states that he has removed, by means of iodide of ammonia, the indurations following the cicatrization of chancre, and the enlargement of inguinal glands. The other syphilitic affections in which he has employed it successively are astralgia, rheumatic pains, periostoses, and enlargement in the cervical glands.

M. Gamberini states that iodide of ammonium possesses the following advantages over the analogous salt of sodium: 1. Its action in attaining the same therapeutic object is more rapid; 2. A much smaller dose is required.—*Bullettino delle Scienze Mediche;* and *Gazette Hebdomadaire*, June 1, 1860.

The conclusions at which M. Gamberini has arrived with respect to the iodide of ammonium agree very closely with those stated by Dr. Richardson in a communication to the Medical Society of London.—*Brit. Med. Journ.*, June 30, 1860.

On the Therapeutical Employment of Double Iodide of Iron and Quinine.—Dr. VIOLETTE has given the double iodide of iron and quinine in several affections in which the preparations of iron have been recommended, and he has been enabled to prolong its use without meeting with the symptoms so often produced by the separate use of iron and quinine. He has never observed either weight at the stomach or offensive eructations, or gastralgia. In many affections of the uterus, after the local treatment has succeeded, the iodide of iron and quinine has seemed to restore the strength and revive the appetite. He has witnessed the same results in convalescence from typhoid fever, and from all diseases which induce a considerable impoverishment of the blood. Dr. Violette considers this medicine peculiarly efficacious in chlorosis. M. Becquerel allowed him to administer it to some young chlorotic girls, whose leading symptoms were complete loss of colour of the mucous membranes, a waxy complexion, excessive weakness, total loss of appetite, blowing murmur in the heart and carotids; in such cases Dr. Violette found that a rapid improvement followed the use of the double iodide. The appetite returned very quickly, and at the same time the strength was restored; a slight rose colour replaced the pale tint of the mucous membrane, and the extreme paleness of the face was changed for the natural colour.—*B. and F. Med.-Chir. Rev.*, Jan., 1861, from *Gazette des Hôpitaux, July*, 1860.

Chloroform Liniment for Dental Purposes.—Take the white of an egg, and add an equal bulk of chloroform: let it digest four hours at an ordinary temperature, when it is fit for use. Apply to the gum, immediately above the aching tooth, by saturating a piece of lint, one half inch in length by one fourth in width. Upon this place a second piece of lint, larger than the first, to protect the lips, which must be allowed to carefully fall upon the two, so as they may retain their place. We have found this an invaluable relief for such disturbances as are not dependent upon ful-

ly-developed inflammation, such as neuralgic disturbances and the first stages of periostitis. A more powerful liniment can be made, by taking one part of white of egg and four parts of chloroform. Put them in a bottle and plunge it in a water-bath, at a temperature of from 120° to 140° Fahrenheit—gelatinization takes place in four minutes. This preparation is to be rubbed on any painful part, when great relief will be experienced. The slow cauterization it produces, and the protection of the part from the atmosphere, render it a very powerful counter-irritant, as applied to the gums in the manner described. We have found it in many cases highly serviceable, and recommend it to more general use. The cold preparation is, perhaps, the best and easiest made; and when a decided effect is required, it should be repeatedly used.—*American Journal of Dental Science.*

Relief of Certain Forms of Aphonia by Anæsthetic Vapors. By FREDERICK D. LENTE, M. D., of Cold Spring, N. Y.—The recent occurrence of a case of this kind, of which the following is a brief abstract, induces me to give publicity to one very similar to it, which occurred in my practice a few months ago.

T. B., æt. 19, a carman, living in London, was attacked in the early part of 1860, with hoarseness, enlargement of the sub-maxilliary glands, and sore-throat. In March, he applied at one of the Dispensaries for relief, and was treated, but without much benefit; he then applied in turn, at several other hospitals, including St. Bartholomew's; having, in the mean time, entirely lost his voice.

In December, he applied to the district medical officer, who, on examining the throat, found the left tonsil slightly inflamed, but no other appearance of disease, and could detect no syphilitic taint or history. He, however, noticed considerable rigidity of the muscles of the jaw, and thought it advisable to try the inhalation of *chloroform*. "He was accordingly placed under its influence, and its effect was

truly magical, as he called out for his mother quite distictly. He went home, and agreeably surprised his friends by speaking to them the first time in *eight months*, articulating every syllable." A week afterwards, his voice had not left him.

The following is a brief history of my own case. Miss M. W., an unmarried female about forty years of age, has been for the most part bed-ridden for the last ten or twelve years, apparently from the effects of a violent and protracted attack of dysentery, for which she was treated by another physician. During all this time, she has also been more or less troubled with a reducible formal hernia. She has never been at all hysterical, or even nervous, in the usual acceptation of the term. Some time in the early part of 1860, she lost her voice, so that she could not articulate above a whisper. This was a source of great annoyance to her, as she is very fond of conversation. She was, of course, very solicitous to have something done for her relief; but, as I could discern no lesion whatever about the faucus or larynx, and could assign no possible cause for the *aphonia*, I was at a loss what course of treatment to pursue, and so did nothing, comforting her with the hope that she might one day regain her voice as suddenly as she had lost it.

In December, 1860, her hernia came down, could not be reduced, and became strangulated, resisting all the attempts of Dr. Richerson, who was first called, and of myself subsequently, to reduce it. In our attempts, we used the inhalation of sulphuric ether twice each time, the patient on her recovery, expressing her belief that she articulated with less effort, although she still spoke in whispers. Finally, a resort to the knife became necessary, and she was again brought fully under the influence of the anæsthetic. The operation was protracted from several causes, and she was under the full influence of the ether for nearly two hours. As soon as she had fully recoverd from the effects of the anæsthetics, she exclaimed, apparently with the greatest delight, and in quite an audible voice,—"Doctor, I can

speak," and she has been "speaking" fluently ever since, now nearly three months.

I always had a suspicion that *hysteria* was at the bottom of this case of aphonia; and Dr. Richards, the reporter of the London case, asks—"May it not be reasonable to conclude that this case was one of mere hysteria?"

It is possible that many chronic forms of throat difficulty, whether attended or not by aphonia, might be benefitted, when all other means fail, as they are so apt to do, by the stimulating, anæsthetic, or antispasmodic effects of ether or chloroform, which treatment, the perusal of these cases may induce others to try.—*American Medical Times.*

Treatment of Blennorrhagia by Injections of Subnitrate of Bismuth.—The subnitrate of bismuth has been lately recommended as a local application in blennorrhagia, but as the results were not altogether satisfactory, M. MOURLON has investigated the circumstances which prevent the success of this kind of medication. He found that the injections of the subnitrate of bismuth, often irritated the urethra; and on testing the salt, he ascertained that it reddened litmus paper. In order to obviate the acidity of the injections, he caused the salt to be washed until it presented no acid reaction; and under these circumstances he has found the injection almost uniformaly successful, and has introduced its use into the military hospitals. In a memoir published by M. Mourlon, he states that out of 37 cases, 32 were cured, and that the average duration of the treatment was twenty-one days. With the exception of four patients who came into the infirmary for relapses, all the cases presented blennorrhagia of five to eight days' duration, and they were all acute cases. In none of them did the inflammation extend to the deep parts of the urethra, so rapidly was it arrested in its progress by the subnitrate of bismuth.—*B. and F. Med.-Chir. Rev.*, Jan., 1861, from *Bull. Gén. de Thérap.*, Sept. 30, 1860.

Reviews and Editorial.

1. *On Diseases peculiar to Women, including displacements of the Uterus.* By Hugh L. Hodge, M. D., Professor of Obstetrics and the diseases of Women and Children in the University of Pennsylvania. Philadelphia: Blanchard & Lea, 1860.
2. *A Treatise on Human Physiology; designed for the use of Students and Practitioners of Medicine.* By John C. Dalton, jr., M. D., second edition revised and enlarged, &c. Philadelphia: Blanchard & Lea, 1861.
3. *A Treatise on Fever, or Selections from a Course of Lectures on Fever, &c.* By Robert Lyons, K. C. C. &c. Philadelphia: Blanchard & Lea, 1861.

We have received the three works, the titles of which are given above, from the accomplished publishers, through the hands of our enterprising and accommodating townsman, W. L. Pomeroy; and we shall proceed to notice them in the order in which they are mentioned.

Hodge on Diseases Peculiar to Women. This is a contribution to medical literature and science from one of the most earnest-minded, zealous and successful medical teachers of this country. In this work, Dr. Hodge presents us with his particular, perhaps we ought to say peculiar, views, in relation to that class of diseases, or more properly speaking, those morbid phenomena, which present themselves for our study and treatment in females, and which, the professor alleges, may be traced to the effects of irritation and of sedation in the different tissues and organs of the economy, especially of the uterine system.

Our author says in his preface, and we much prefer he should speak for himself on this subject, that "This work, prepared at the request of many of my pupils, presents the results of my observations and reflections on the diseases peculiar to women. These diseases may be traced to the

effects of irritation and of sedation in the different tissues and organs of the economy, especially of the uterine system. The causes of such disturbances are exceedingly diversified; but, so much depends on displacements of the uterus that it was thought advisable to devote a separate part to their consideration, especially as the consequences and treatment of such accidents are still the subjects of much professional discussion."

In the above extract we find, without doubt, the real motive which has impelled Dr. Hodge to become an author. He has been for many years importuned to give his views, *in book form*, on the "diseases peculiar to women." Many of his pupils will be gratified to know that they now have their kind mentor always at hand and ready for consultation

This treatise is systematically divided into three parts. The first part relates to diseases of irritation or of exalted and deranged irritability or susceptibility; the second to displacements of the uterus, which Dr. Hodge regards as the chief cause of the diseases of the first part; while the third part treats of the organic and nervous diseases of sedation, but especially of sedation of the uterus with its consequences. In a word, the work has been written for the purpose of giving to the medical public through the press professor Hodge's views on the pathology and therapeutics of the neurotic states of the uterus and its appendages.

But we seriously doubt whether the professor has added an atom to his standing as a medical philosopher and teacher by writing this book. We may be mistaken; but our judgment is, that those who have held rival opinions will now have an advantage over him, which they have not heretofore enjoyed.

That Dr. Hodge considers too many of the diseases of women to be owing to irritable uterus, must be apparent, we think, to the careful student of nature, and the daily practitioner of medicine who brings to the study of this subject an unprejudiced mind. So far from this being always the case, or

even most generally so, we incline to the opinion that our author has reversed somewhat the condition of things, at least as regards their importance. May not a general morbid irritability of the whole system, in which the uterus in an equal degree participates, or even, from well known causes, in an overbalancing manner sympathises, be oftentimes the true state of the case? and will not such irritability of uterus, as well as of the whole system, be more certainly cured by appropriate hygeinic and general treatment, than by the introduction of a pessary into the vagina? We know it will; because we have frequently seen it done. We also know that slight displacements of the uterus do not necessarily require the use of pessaries for their relief. Moreover, that Dr. Hodge attaches too much importance anyhow to the use of pessaries, may, we think, be very justly inferred from the following quotations from his work. Speaking of the essential benefits and *perfect* relief experinced from them, he says:

"That the local symptoms of weight, pain, etc, the leucorrhœa, the menorrhagia, the dysmenorrhœa, and all the innumerable direct and indirect symptoms of spinal and cerrebral irritation, including neuralgia, nervous headache, nervous affections of the larynx, lungs, heart, stomach, bowels, etc., as also spasms, cramps, and convulsions, may often be dissipated; that the intellectual and spiritual being may be elevated from the lowest state of depression, bordering on melancholy, or be delivered from the highest degree of maniacal excitement, and that the whole economy may thus be revolutionized. Patients are often amazed at their own altered sensations; they can hardly realize their identity—feeling as if they were either renovated, or that they had been transported to a 'new world.'"

The lever pressary is the kind preferred by Dr. Hodge and the one which produces the *wonderful effects* detailed above. The wearing of it, "does not necessarily," he says, "produce any irritation, organic or nervous, or any leucorrhœa, menorrhœa, inflammation, etc. It can be worn at all times, night and day; it interferes with no motion, and no function; the patient has no attention to pay to it, ex-

cept a daily vaginal wash; she may, and often does forget its presence; can enjoy her connubial pleasures, can move about in society without anxiety, is free from local and general nervous irritations, from corporial, intellectual and spiritual disturbance, &c., &c."

Now, however much we may admire professor Hodge, and we really have had great respect for him, we certainly have no special liking for such transporting fancies as these. Indeed, we hope to live to see the day, when the present fashion for pressaries and speculums will be toned down by judgment and discrimination, good taste and virtuous feeling.

Yet, after all, this book is a valuable contribution to medical literature, and must be regarded as one of the standard works of the day; because as to some of the subjects discussed by him, Dr. Hodge is almost the only medical historian. We refer particularly to those nervous affections dependant upon irritation of the medullany matter of the brain, spinal marrow and nerves. He describes these well; and we know that many of his suggestions as to their treatment will be found eminently useful in practice.

Dalton's Treatise on Human Physiology.—This is the second edition of this work, revised and enlarged. In the preface to the first edition the author says: "This volume is offered to the medical profession of the United States, as a text-book for students, and also as a means of communicating, in a condensed form, such new facts and ideas in physiology as have marked the the progress of science within a recent period." To accomplish this object, it became necessary to present not only the conclusions which physiologist have been led to adopt on any particular subject, but to establish or coroborate them by original investigations, or by a repetition of the labors of others, thus showing the experimental basis upon which the conclusions are founded. Dr. Dalton's learning and ability as a physiologist and teacher have enabled him to produce the very best text-book on

human physiology that we ever read; while, if we are not greatly mistaken, it will prove to be equally as well adapted to supply the wants of the daily practitioner. It is commendable for its originality, its clearness; for its fullness and beauty of illustration; and for the simple though elegant language in which it is written. Every intellgent and cultivated physician in the country ought to have this book.

3. *Lyon's Treatise on Fever.*—This is an admirable work upon the most remarkable and most important class of diseases to which mankind are liable. Even in war the deaths by fever greatly exceed in number, those which are caused by saber cuts and gun-shot wounds. Hence a complete and thorough education in the pathology and therapeutics of fever constitutes the first most essential requirement of the medical officer in the public service, as well as the civilian in full and daily practice. "But," our author says, "I believe that while with a competent knowledge of anatomy and the ordinary principles of surgery, the results of even one campaign will make an efficient operator of the diligent and observant staff and regimental assistant surgeon, and prepare him for almost any emergency of the battle field, nothing can supplement the want of an early and systematic training in the pathology and therapeutics of fever. I have myself guided the eager and nervous, though resolute hand of a junior assistant-Surgeon in his first operation in the field, and I have seen that same person, but a few months later, wield the knife with all the skill, the dexterity, and the firmness of a practised operator. On the other hand, I have known men to be bad practitioners in fever, who were not deficient in ability or power of observation, who had passed through many campaigns, and who had had repeated opportunities of witnessing fever epidemics on a large scale, but who, from deficiency in original training and in the principles of the pathology and treatment of fever, continued, and I firmly believe were ever

destined to continue, unsafe practitioners in this great class of diseases. Indeed, I believe that if the ground work of this most essential study be not properly laid before you pass into the turmoil and agitation of active professional life, no matter what your abilities, no matter what your subsequent acquirements, you will never deserve that amount of confidence that could be safely reposed in the diligent student of three years' standing, who had zealously pursued the study of fever as taught in this city." Such is the opinion of one who was himself a surgeon of the British army in the Crimean War, and who was afterwards a lecturer in the medical school of Dublin. When entrusted as medical officer with the care of the chosen troops of his country in time of war, he discharged duties of high character, immediate importance, and direct utility; and yet he has rendered equally as important and useful service to his country and to mankind, we think, by his lectures and published writings.

In his preface he says: "As it would not be possible to embrace in a single volume all the varieties of fever, I have thought it best to deal only with those forms of the disease which are of most practical importance." Hence, we have treated of in this volume, Simple Continued Fever, Varieties of Synochal Fever, Typhous Fevers, Typhoid Fever, of Crimea, Yellow Fever, Pathological Anatomy of Yellow Fever, and the Yellow Fever of Lisbon. These, together with three other chapters, being the first in the book, on general observations, General Pathology of Fever, and classification of Fevers, constitute a whole, which as a systematic work on Fever, is entitled to rank among the first of its class. The author seems to be fully persuaded of the paramount importance of the study of Fever, and thinks it actually criminal in a medical man not to be prepared by diligent study with such a knowledge of its pathology and therapeutics as is requisite to oppose successfully the hostile advances of this fell disease. We trust this work will be generally read and carefully studied, especially as

the present condition of our country makes it of the utmost importance that our medical men should be thoroughly educated upon the subject of Fevers.

The Transactions of the American Medical Association. Vol. xiii, 1860, *Pp.* 930.—We have also received from Mr. Pomeroy the above work, which, in appearance, is very much like the preceding volumes of Transactions of the American Medical association. It contains thirteen papers written by different persons, making a ponderous volume, too inconveniently large to handle easily or to read with comfort; while it can hardly be classed, properly speaking, among books of reference.

The address of the retiring president, Dr. Henry Miller, is on the subject of medical education. It is an old theme with the association, and one which has been further ventilated in this volume by the regular report of the Standing Committee on medical education, written by Dr. Reese. Every reading medical man in the country, we presume, is familiar with the principle ideas and main arguments of the Report and the Address. They may be comprised in the charge that, medical students are not sufficiently well instructed in their profession to practice it, and that the remedy for this evil is to "elevate the standard" of medical education. Almost the same things have been put forth by the association every year, and we have no dobut much will be said at the Chicago meeting in June of a like character. Whatever any material progress and improvement have been effected in medical education by the annual efforts of the association remains to be seen. The schools being wholly independent of the association are fully capable of successfully managing this matter, and thus carrying out their own plans and purposes in regard to it. This, indeed, they have done; and if the opinion of the retiring president, as set forth in the following extract from the address, is entitled to much weight or credit, then there has not only not been any "*elevation in the standard*" of medi-

cal education within the last quarter of a century, but a most decided falling off. He says, "That there has been a great default in medical education within the last five-and-twenty years, it were useless to deny. The education of physicians has not kept pace with that of theologians, or even lawyers; and our profession has so far lost caste as scarcely to deserve to be ranked among the learned. I make this confession in no captious spirit, but with deep and painful mortification.

But is this so? Have we fewer good physicians and surgeons, and well educated medical men now, than we had twenty-five years ago? Are the physicians of our country less diligent students or careful observers than formerly? or are our medical men less respected abroad than they have been heretofore? We think not, and believe that Dr. Miller is, in the main, mistaken. Yet we urge upon private teachers, and especially upon the Schools a due consideration of the subject, for they can together accomplish much.

The next paper is by Dr. Smith on the medical Topography and epidemics of New York. It possesses the advantage of a map, but it is very long, occupying nearly two hundred pages, and is unquestionably inferior in practical value to a report from Dr. James H. Dickson of this State upon the same subjects.

The next paper comes under the head of the surgical section, and is from the pen of Moutrose A. Patten, M. D., Mo. It occupies about sixty pages, and is a very good résumé on Anchyloblepharon, symblepharon, trichiasis entropion, ectropion, and strabismus.

The next in order, is, a report on the improvement in the art and science of surgery in the last fifty years by Joseph N. McDowell, M. D. There is about forty pages of it, much of which is devoted to home surgeons, home surgery and home folks generally. We yield to none in love for our country and admiration of our countrymen. The *vinculum natale soli* is the governing principle with us, and we mean to stand or fall with our section; but there is

something quite distasteful in this paper. It is written in a fulsome style and contains disagreeable matter, in both respects wholly unbecoming the subject and the occasion.

There are eleven other reports, on different subjects, embracing about four hundred pages, but we have not the space or time to give them a distinct notice, which we regret very much, as this volume of Transactions of the American medical association may be the last of the kind that will ever issue from the American press.

We are under obligations to Charles T. Evans, Esq., publisher, of New York, through Mr. Pomeroy, for An Epitome of Braithwaites Retrospect of Practical Medicine and Surgery, containing a condensed summary of the most important cases; their treatment, and all the remedies and other useful matters embraced in the forty volumes—the whole being alphabetically classified, and supplied with an addenda, comprising a table of french weights and measures, reduced to english standard—a list of incompatibles—explanation of the principal abreviations occurring in pharmaceutical formulæ—a vocabulary of latin words most frequently used in prescriptions, and a copious index, in six parts, by Walter S. Wells, M. D.

This work, Braithwaite's Retrospect, before it was condensed, being in forty volumes, although it contained the richest material and the most important information upon almost or quite every subject connected with theoretical and practical medicine and surgery, was inaccessible to the profession generally. Dr. Well's laborious, but eminently successful undertaking, to present to the profession an epitome of this voluminous work is worthy of all commendation and will be duly appreciated by reading men, as well as those daily practitioners who hold the laboring oar.

L. S. Joynes M. D.

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Manson's Reply to Howard

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